#### **Self Study Report (SSR)**

#### For NAAC Accreditation of

#### I.T.S ENGINEERING COLLEGE

#### **Submitted to**



#### NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL



 $\mathbf{B}\mathbf{y}$ 

#### I.T.S ENGINEERING COLLEGE



(Approved by AICTE, Govt. of India and Affiliated to Uttar Pradesh Technical University, Lucknow)

(An ISO 9001:2008 Certified Institute)

46, Knowledge Park-III, Greater Noida, Distt. Gautam Budh Nagar (U.P.)

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	academic year 2013-14			

# PART-A Preface

#### **PREFACE**

I.T.S Engineering College was founded by Dr. R.P. Chadha in 2006 under the aegis of Durga Charitable Society. The college is located amid verdant surroundings at Knowldege Park III, Greater Noida in the National Capital Region. The City is well connected by road and rail to all important cities in and around the state.

The college has good infrastructure and qualified and experienced faculty, well supported by competent technical supporting and administrative staff.

The college has been granted the status of extension affiliation by Uttar Pradesh Technical University, Lucknow in 2013, in continuation of the same recognition granted earlier by Uttar Pradesh Technical University, Lucknow in 2006 for a period of one year.

The college has been awarded CMAI National UP Education Award 2013 for excellent progressive Engineering Education Institute. The college is regarded as one of the Best Private Engineering Colleges in the State of Uttar Pradesh.

With these credentials, the college is presenting its application to the National Assessment and Accreditation Council for the accord of accreditation status.

# PART-B Profile of the Institute

#### **B.** Profile of the Affiliated College

#### 1. Name and address of the college:

Name : I.T.S ENGINEERING COLLEGE
Address : Plot No.46, Knowledge Park-III

City : Greater Noida Pin : 201308

District : Gautam Budh Nagar State : Uttar Pradesh

Website: www.its.edu.in

#### 2. For communication:

Designation	Name	Telephone with STD code	Mobile	Fax	Email	
Director	Dr. Vineet	0120-	9711994485	0120-	director.ec	
	Kansal	2331014		2331037	@its.edu.in	
Vice Principal			NA			
Steering Committee	NA					
Coordinator						

	Steering Committee Coordinator	l	NA	
3.	Affiliated Colleg	e :	$\square$	
	Any other (Speci	fy) :		
4.	Type of Instituti	on:		
	a. By Ger	nder		
	i.	For Men :		
	ii.	For Women :		
	iii.	Co-education:	$\overline{\checkmark}$	
	b. By Shi	ft		

	i. <b>Regular</b>	:			
	ii. Day	:			
	iii. Evening	:	$\overline{\checkmark}$		
5.	Is it a recognized minority	institut	tion?		
	Yes : No	:	$\overline{\mathcal{L}}$		
	If yes specify the minority s	tatus (	<b>LY</b> Religious/linguistic/ 2	ny other) and provide	
	documentary evidence.	tatus (	Acingious/iniguisuc/ a	ny other) and provide	
_	•				
6.	Source of funding:				
	Government :				
	Grant in aid :				
	Self Financing :		$\overline{\checkmark}$		
	Any other :		一		
	,				
7.	a. Date of establishment of the college: 11-07-2006 (dd/mm/yyyy)				
	<b>b.</b> University to which the co	llege is	s affiliated /or which go	overns the college	
	(If it is a constituent college)				
	UTTAR PRADESH TECH	NICAI	I. UNIVERSITY 1.110	CKNOW II P	
	OTTAKT KADESII TECI	111011	E CIVIVERSITI, EC		
	(Conv of Grant / Renewal of	Affilia	tion from the Academi	c Year 2013-14 by Uttar Pradesh	
	Technical University is enclo			e rear 2013 11 by Chair Fladesii	
	c. Details of UGC recognition	on:			
	<b>Under Section</b>	Date	e, Month & Year	Remarks	
			-mm-yyyy)	(If any)	
	$\underline{\operatorname{Sec}\ 2(f)}$	Lett	er submitted to UGC		

d. Details of recognition/approval by statutory/regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI etc.)

Under Section/ clause	Recognition/ Approval details Institution/	Day, Month and Year	Validity	Remarks
	Department/ Programme			
F.No. Northern/1- 2008728352/2014/EOA	B.Tech: CSE, IT,ECE, EEE, ME &CE	04-06-2014	1 Year	
	M.Tech: CSE & ECE			
	MCA & MBA			

(Copy of AICTE Extension of Approval for the academic year 2013-14 is enclosed as **Annexure –II**)

	Yes No
	If yes, has the College applied for availing the autonomous status?
	Yes No
9.	Is the college recognized
	a. By UGC as a College with Potential for Excellence (CPE)?
	Yes No
	If yes, date of recognition: (dd/mm/yyyy)
	b. For its performance by any other governmental agency?
	Yes No 🗸

10. Location of the campus and area in sq.mts:

Location *	Urban
Campus area in sq. mts.	40469
Built up area in sq. mts.	21097

<sup>(\*</sup> Urban, Semi urban, Rural, Tribal, Hilly Area, Any other specify)

11.	Facilities available on the campus (Tick the available facility a other details at appropriate places) or in case the institute has a agencies in using any of the listed facilities provide inform covered under the agreement.	n agre	ement w	ith other
	➤ Auditorium/seminar complex with infrastructural facilities	:	$\checkmark$	

>	Sport	s facilities		
	•	play ground	:	$\checkmark$
	•	swimming pool	:	
	•	Gymnasium	:	

> Hostel

• Boys' Hostel :

i) Number of Hostels : 02ii) Number of inmates : 621

iii) Facilities (mention available facilities)

Spacious rooms with common bathrooms, Table, Chair, Bed & Fan, Common Room with facilities like TV and Reading Room with facilities of News Papers, Magazines, Gymnasium, Mess, R.O. Water Plant, Power Backup, Solar Water Heater, Wi-fi facility etc.

•	Girls Hostel			$\checkmark$
	i) Number of Hostels	:	01	

ii) Number of inmates : 192

iii) Facilities (mention available facilities)

Spacious rooms with common bathrooms, Table, Chair, Bed & Fan, Common Room with facilities like TV and Reading Room with facilities of News Papers, Magazines, Gymnasium, Mess, R.O. Water Plant, Power Backup, Solar Water Heater, Wi-fi facility etc.

	• Working women's Hostel :	NA
	i) Number of inmates	
	ii) Facilities (mention available facilities)	
>	Residential facilities for teaching and non-teaching staff	$\checkmark$
	39 flats available for teaching and non-teaching including Director	
>	Cafeteria :	
>	Health Centre :	
>	First aid, Inpatient, Outpatient, Emergency care facility,	
	Ambulance	
	Health centre staff –	<b>L</b>
	Qualified Doctor: Full time Part-time	
	Qualified Nurse: Full time Part-time	
>	Facilities like banking, Stationery shops :	$\overline{A}$
>	Transport facilities to cater to the needs of student and staff :	$\overline{\checkmark}$
>	Animal house :	NA
<b>A</b>	Biological waste disposal : Generator or other facility for management/regulation	$\overline{\checkmark}$
	of electricity and voltage :	
>	Solid waste management facility :	abla
>	Waste water management :	*
>	Water harvesting :	
* [	The Greater Noida Authorities has installed a centralized Sewage Treat	ment Plant for al

<sup>\*</sup> The Greater Noida Authorities has installed a centralized Sewage Treatment Plant for all the Institutions located in Knowledge Park.

**12.** Details of programmes offered by the college (Give data for current academic year) : 2014-15

Sl.	Program	Name of the	Duration	Entry	Medium of	Sanctioned	No. of
No.	Level	Program/	(Years)	Qualification	instruction	/	students
		Course				approved	admitted
						Student	
						strength	
1.	Under-	B.Tech	4	Intermediate	English	180	152
	Graduate	Computer					
		Science and					
		Engg.					
2.		B.Tech	4	Intermediate	English	120	32
		Electronics &					
		Communication					
3.		B.Tech	4	Intermediate	English	60	21
		Electrical &					
		Electronics					
		Engg.					
4.		B.Tech	4	Intermediate	English	240	150
		Mechanical					
		Engg.					
5.		B.Tech	4	Intermediate	English	120	66
		Civil Engg.					
6.	Post-	M.Tech	2	B.Tech	English	18	3
	Graduate	Computer		COE / ITE			
		Science and		CSE / IT			
		Engg.					
7.		M.Tech	2	B.Tech	English	18	2
		Electronics &		(ECE)			
		Communication		(ECE)			
8.	1	Master of	2	10+2+3	English	60	17
		Business					
		Administration					

13	3. Does	the college	offer self-financed	Programm	es?		
		Yes	$\square$	No			
		If yes,	how many?	:	ALL		
14	l. Nev	v programm	es introduced in th	e college d	uring the last five	years if any?	
		Yes	Ø	No			

Number: 04

15. List the departments: (respond if applicable only and do not list facilities like Library, Physical Education as departments, unless they are also offering academic degree awarding programmes. Similarly, do not list the departments offering common compulsory subjects for all the programmes like English, regional languages etc.)

Faculty	Departments (e.g. Physics, Botany, History etc.)	UG	PG	Research
Science	-	-	-	-
Arts	-	-	-	-
Commerce	-	-	-	-
	Civil Engineering	B.Tech(CE)	-	-
	Computer Science Engineering	B.Tech(CSE)	M.Tech(CSE)	-
Any other	Electronics & Communication Engineering	B.Tech(ECE)	M.Tech(ECE)	-
(Specify)	Electrical & Electronics Engineering	B.Tech(EEE)	-	-
	Mechanical Engineering	B.Tech(ME)	-	-
	Master of Business Administration	-	MBA	-

#### 16. Number of Programmes offered under

(Programme means a degree course like BA, BSc, MA, and M.Com...)

a. Annual system : --

b. Semester system : All

c. Trimester system : --

#### 17. Number of Programmes with

	a. Choice Based Credit System					:	NIL			
	1	b. Inte	r/Multidiscipli	nary Approach		:	NIL			
	(	c. Any	other (specify	and provide de	etails)	:	NIL			
18.	Do	es the	college offer l	UG and /or PG	oprogra	ammes	in Teacher Ed	ucation?		
			Yes		No	$   \overline{\mathbf{Z}} $				
	If y	es,								
	a.	Year	r of Introductio	n of the progra	mme(s)					
		(dd/1	mm/yyyy) and	number of batc	hes that	t comple	ted the progran	nme		
	b. NCTE recognition details (if applicable)									
		Noti	fication No.:				•••			
		Date	<u>;</u>		(dd/mm	/yyyy)				
		Vali	dity:							
	c.	Is th	he institution	opting for as	sessme	nt and	accreditation of	of Teacher	Education	
		Prog	gramme separat	ely?						
			Yes		No					
19.	Do	es the	college offer l	UG or PG prog	gramm	e in Phy	sical Educatio	n?		
			Yes		No					
If y			XX	1				(11)	. 1	
	6	a.		•	_			(dd/mm/yy	yy) and	
				ches that comp			amme			
	ł	b.	_	ition details (if						
				Vo.:						
			Date:		(d	d/mm/y	ууу)			
			Validity:							
	(	c.	Is the instituti	on opting for a	ssessme	ent and a	ccreditation of	Physical Edu	ucation	
			Programme separately?							

**20.** Number of teaching and non-teaching positions in the Institution.

			Teachin	g facu	lty		Non-	teaching	Tec	chnical
Positions	Professor		Associate Professor		Assistant Professor		staff		Staff	
	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F
Sanctioned by the UGC / University / State Government Recruited	nctioned by B GC / niversity / 18 35 105 nte overnment		As required		As required					
Yet to recruit	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Sanctioned by the Management / society or other authorized bodies Recruited	5	0	10	4	107	48			30	
Yet to recruit	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

#### \*M-Male \*F-Female

#### 21. Qualifications of the teaching staff:

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
_	Male	Female	Male	Female	Male	Female	
<b>Permanent teachers</b>							
D.Sc./D.Litt.	-	-	-	-	-	-	-
Ph.D.	5	0	6	3	2	5	21
ME / M.Tech			4	1	89	26	120
M.Phil.	_	-	-	-			
PG (M.Sc/ MA/							
M.Com/	_	-	-	-	16	17	33
MCA/MBA)							
UG (B.Tech)	-	-	-	-	-	-	-
Temporary Teachers : NIL							
Part-time Teachers : N	NIL						

- 22. Number of Visiting Faculty / Guest Faculty engaged with the College. :  $\ensuremath{\mathrm{NIL}}$
- 23. Furnish the number of the students admitted to the college during the last four academic years. (MBA and MCA to be include)

Categories	Categories Year 1 2013-14			Year 2 2012-13		Year 3 2011-12		Year 4 2010-11	
	Male	Female	Male	Female	Male	Female	Male	Female	
SC	18	02	22	03	26	00	38	06	
ST	00	00	03	00	01	00	01	00	
OBC	188	16	236	15	159	11	129	15	
General	317	38	327	32	258	64	219	70	
Others	-	-	-	-	-	-	-	-	

24. Details on students enrollment in the college during the current academic year: 2013-14

Type of students	UG	PG	M.Phil	Ph.D	Total
Students from the same state where the college is located	291	38	-	-	329
Students from other states of India	250	0	-	-	250
NRI students	-	-	-	-	-
Foreign students	-	-	-	-	-
Total	541	38			579

25.	<b>Dropout</b> :	rate in l	UG and	PG	(average	of the	last two	hatches)
40.	DIOPOUL.	iau iii v	CO and	ı o	(a v Ci az C	oi tiit	iasi inu	vaulics,

6.07 1.85 UG PG

#### 26. Unit Cost of Education

(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)

> Rs.95,378/-(a) including the salary component:

> (b) excluding the salary component: Rs.52,909/-

27. Do	es the colle	ge offer a	ny programn	ne/s in di	stance educatio	on mode (DEP)?
	Yes	S		No	$\square$	
	If yes,					
	a) is it a reg	gistered ce	entre for offeri	ng distar	ice education pro	ogrammes of another
	University					
	Yes	8		No	Ø	
	b) Name of	f the Univ	ersity which h	as grante	d such registrati	on <b>N.A.</b> -
	c) Number	of progra	mmes offered			– N.A
	d) Program	imes carry	the recognition	on of the	Distance Educat	tion Council.
	Yes	5		No	Ø	
28. Pr	ovide Teacl	ner-stude	nt ratio for ea	ch of th	e programme/c	ourse offered
	Program	Course				Faculty : Student Ratio
	B.Tech	Civil En	gineering			1:15
				-in nin -		
		Compute	er Science Eng	1:15		
		Electron	ics & Commu	1:15		
		Electrica	al & Electronic	1:15		
		Mechan	ical Engineerir	1:15		
	MBA	Master	of Business Ac	dministra	ntion	1:12
	M.Tech	Comput	er Science Eng	gineering		1:12
		Electron	ics & Commu	nication	Engineering	1:12
Cy Re	vcle 1: 🗹 e-Assessmen	Cycle t: □	_	Cycle	_	Cycle 4:   3 and Cycle 4 refers to re-
30. D		ditation*	(applicable fo	or Cycle	2, Cycle 3, Cyc	ele 4 and re-assessment only)
- N	√A-					

Cycle 1:	(dd/mm/yyyy) Accreditation Outcome/Result
Cycle 2:	(dd/mm/yyyy) Accreditation Outcome/Result
Cvcle 3:	(dd/mm/yyyy) Accreditation Outcome/Result

- 31. Number of working days during the last academic year. : 240
- **32. Number of teaching days during the last academic year** : 186

(Teaching days means days on which lectures were engaged excluding the examination days)

- 33. Date of establishment of Internal Quality Assurance Cell (IQAC): 03/01/2014
- ${\bf 34.}\, Details\, regarding\, submission\, of\, Annual\, Quality\, Assurance\, Reports\, (AQAR)\, to\, NAAC.$

NA

AQAR (i) - NA AQAR (ii) - NA AQAR (iii) - NA AQAR (iv) - NA

35. Any other relevant data (not covered above) the college would like to include. (Do not include explanatory/descriptive information)

Nil

<sup>\*</sup> Kindly enclose copy of accreditation certificate(s) and peer team report(s) as an annexure.

## **PART-C**

# Criteria-wise Evaluation Report

#### 1. Criterion I - Curricular Aspects

#### 1.1 Curriculum Planning and Implementations

### 1.1.1 State the vision, mission and objectives of the institution, and describe how these are communicated to the students, teachers, staff and other stakeholders.

#### Vision

To be the technical institute of choice

#### Mission

To make incessant endeavors to create learning processes in response to changing technical paradigms

#### **Objectives**

- To develop new learning techniques
- To Improve teaching processes
- To expand the information technology capacity
- To strengthen industry interactive network
- To facilitate technocrats so that they realize and achieve their potential
- To inculcate team spirit among the learners

The vision, mission & objectives are communicated to the students & stake holders by displaying them on all the prominent areas such as college website, brochure, reception area, visitors, faculty sitting area, Head's cabin, seminar Hall. The objectives of all the courses delivered are in sync with the vision and mission of the college.

# 1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific example(s).

- The academic calendar is prepared in accordance with the university's academic calendar to complete the semester curriculum timely.
- Thereafter, the heads of concerned department conduct a meeting with their faculty to allocate the subjects and time table is prepared accordingly.

- The faculty prepares the lecture plan as per planned academic calendar.
- The progress of lectures is monitored through AWR (Academic Weekly Report) and ADR (Academic Daily Report).
- The internal assessment of students is done through sessional examinations conducted twice in a semester.
- The assignments are given to the students to motivate them to refer the various sources of information available and assess the progress of the subject.
- The sessional result is analyzed to assess the student's performance in the subjects.
- On the basis of students performance weak students are indentified and remedial actions are taken by the concerned faculty.
- The monitoring and controlling of classes and laboratories are done by the concerned head of department to resolve any issue, if any.

# 1.1.3 What type of support (procedural and practical) do the teachers receive (from the University and/or institution) for effectively translating the curriculum and improving teaching practices?

All type of infrastructure, stationary, consumable/ non consumable, ICT support etc. are provided by the institute for effectively translating the curriculum and improving teaching practices.

College has a very spacious, modern library which is extremely rich in resources for learning, research and general awareness. Latest information in terms of text & reference books, magazines, periodicals, journals, CD's and videos have been procured for intellectual nourishment. In addition to this, each department has its own departmental library that provides ready reference to translate the curriculum.

The college provides all logistics and financial **support to strengthen the courses by conducting** guest lectures/ invited talks/ FDP's etc. Incentives are awarded to the faculty on the basis of their academic performance to encourage them. College also provides the financial support to attend FDPs, Conferences, Seminars, and Workshops etc.

# 1.1.4 Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the Curriculum provided by the affiliating University or other statutory agency.

In addition to the regular curriculum prescribed by the University, college conduct PDP classes, technical sessions, industrial visits, guest lectures, seminar & conference etc. to enhance the employment opportunities in various areas.

- The academic calendar is prepared in accordance to the university's academic calendar to complete the semester curriculum timely.
- Thereafter, the heads of concerned department conduct a meeting with their faculty to allocate the subjects and time table is prepared accordingly.
- The faculty prepares the lecture plan as per planned academic calendar.
- The progress of lectures is monitored through AWR (Academic weekly report) and ADR (Academic daily report).
- The internal assessment of students is done through sessional examinations conducted twice in a semester.
- The assignments are given to the students to motivate them to refer the various sources of information available and assess the progress of the subject.
- The sessional result is analyzed to assess the student's performance in the subjects.
- On the basis of students performance weak students are indentified and remedial actions are taken by the concerned faculty.
- The monitoring and controlling of classes and laboratories are done by the concerned head of department to resolve any issue, if any.

The College takes initiatives for effective curriculum delivery in the following ways:

- The College issues an academic calendar, time table and a holiday list.
- Each department prepares workloads for the individual faculty for effective transaction of the curriculum.
- Effective measures are taken for efficient utilization of academic time for weaker students.

The participation of students in co-curricular and extra-curricular activities is encouraged so that the ideals of national integration, cooperation, tradition and culture are supported.

The College staff is trained by the Computer Science and Engineering Department to make them familiar with the use of computers so that they are able to use the modern resources such as internet, projectors etc. The college also conducts Personality Development Programs as part of curriculum for 2<sup>nd</sup>, 3<sup>rd</sup> & 4<sup>th</sup> year students. The college provides a Book Bank facility to the students/ faculty where all the text books are available. The different value added programs such as .net, PLC SCADA, CAD/ CAM etc. are successfully conducted by various departments of the college.

### 1.1.5 How does the institution network and interact with beneficiaries such as industry, research bodies and the university in effective operationalisation of the curriculum?

The college has a corporate resource center (CRC) department to interact with the industry. The CRC department has following roles and responsibilities:-

- Enabling and nurturing industry institute bond by frequent visits, follow-ups, thereby narrowing down the gap.
- Focusing on the core function of placement and also performing support functions like brand-building, shaping student's personalities and synchronizing these efforts.
- Customized guidance to the students and mentoring them identify to the right career path, best suited to their skills.
- Organize and coordinate campus placement programs in order to fulfill its commitment of a
  job to every participant. The major asset of the group is the strong relations established with
  industry during past 8 years of its existence. The students so far have been placed in
  organizations of repute.
- Various kinds of FDPs, Conferences, and Workshops are conducted by various departments in association with professional societies so that students as well as faculty can acquire the recent developments in their respective fields.
- Value added courses are conducted in association with different industries such as IISD,
   Lelogix, Rockwell, ATS infotech etc.to enhance the employability of the students along with the practical exposure to various industrial applications.

#### Research

International and National level Seminars, Conferences and Workshop are organized in the college to identify the research prospects in various fields. In addition to this each department invites eminent personalities from reputed academic institution and industrial organization to deliver expert lectures on emerging technologies so that the faculty and students can explore new research avenues. The college also organizes Faculty Development Programs, Management Development and Staff Development Programs at regular intervals to provide indepth knowledge about specific area. Some of the faculty as well as students are the member of various societies such as ISTE, IEEE, ACM, ACME, IET etc.

#### University

University provides financial support to the college for conducting various Workshops, Seminars and Conferences in the college. University also organizes such type of programs and the college administration motivates all the faculty members to actively participate in them.

1.1.6 What are the contributions of the institution and/or its staff members to the development of the curriculum by the University? (number of staff members/departments represented on the Board of Studies, student feedback, teacher feedback, stakeholder feedback provided, specific suggestions etc.

The Director of the college is a member of Board of Studies (BoS) and also a member of academic council of university. The college supports the development of the curriculum through suggestions offered by the Director during the BoS meetings. Though the college faces constraints to modify the syllabus on its own, yet the affiliating university has a system in place to get recommendations from its affiliated colleges through BoS. A large number of faculty members represent the academic bodies of the UPTU, Lucknow who regularly participate in the process of syllabus design.

Faculty members brain storm and discuss amongst themselves the relevance of the syllabus designed by the affiliating university. While recommending or forwarding the suggestions to the Board of Studies our teachers take into consideration the students' feedback as well as other faculty members. It has been a regular practice of the college to depute senior faculty to counsel the students and get formal and informal feedback.

1.1.7 Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating university) by it? If 'yes', give details on the process ('Needs Assessment', design, development and planning) and the courses for which the curriculum has been developed.

No. The curriculum is developed by the affiliated university and college follows the same as per the guidelines provided by the university.

## 1.1.8 How does institution analyze/ensure that the stated objectives of curriculum are achieved in the course of implementation?

Institute analyzes and ensures that the stated objectives are achieved by following mechanism:-

- Students' performance is monitored through the **analysis of records and number of** passed students in examinations conducted by university.
- The number of students who got placed and number of students' opted for higher studies are identified.
- Regular feedback is taken from different stakeholders such as students, parents, faculty etc.
- Suggestions proposed by external stakeholders are taken into account for improvement.

#### 1.2 Academic Flexibility

### 1.2.1 Specifying the goals and objectives give details of the certificate/diploma/skill development courses etc., offered by the institution.

The goals and objective of the different courses offered by the college are as follows:

- To enhance the employability prospects of the students.
- To brush up their knowledge according to modern technological development.
- To develop the self confidence among students.
- To boost the positive attitude among the student in terms of self employability.
- To motivate students to contribute positively to the society and nation at large.
- To motivate the students for higher studies.

In addition to this, various industrial visits, technical sessions, PDP sessions, National/International Conferences, Expert talks, guest lecture etc. are conducted by the college. The different certificate courses offered by the college: NIL

1.2.2 Does the institution offer programmes that facilitate twinning /dual degree? If 'yes', give details.

No

- 1.2.3 Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skills development, academic mobility, progression to higher studies and improved potential for employability?
  - Range of Core /Elective options offered by the University and those opted by the college
  - Choice Based Credit System and range of subject options
  - Courses offered in modular form
  - Credit transfer and accumulation facility
  - Lateral and vertical mobility within and across programmes and courses
  - Enrichment courses

The college provides academic flexibility for creating learner-friendly academic environment. All these endeavors have been helpful to students in terms of skills development, academic mobility, progression to higher studies and improved potential for employability.

#### Range of core/Elective options offered by University and those opted by the college.

Core and elective options are there as per university curriculum and the same is executed by the college. Advanced and enriched elective courses are offered during U.G / P.G. Programs as per the university recommendations and these electives subjects helps to enrich the knowledge of students in a specific domain to nurture the students' interest.

#### **Choice Based Credit System and range of subject options**

The College provides required academic flexibility for creating a learner friendly academic atmosphere. All the courses offered by the college strive to increase employability quotient of the students. These courses also open new avenues of higher education.

#### Course offered in modular form

All the courses offered and delivered by the college are in modular form.

#### Credit transfer and accumulation facility

No

#### Lateral and vertical mobility within and across programmes and courses

The policy of vertical mobility is available as per the university norms for all the branches during B. Tech courses and the criteria for this mobility is student's merit and availability of seats in the concerned department.

#### **Enrichment Course**

Various guest lectures/ expert talks are organized by all the departments to update the knowledge of our students. Personality Development Program and various Technical sessions are organized to improve the personality, communication and technical skills of the students.

1.2.4 Does the institution offer self-financed programmes? If 'yes', list them and indicate how they differ from other programmes, with reference to admission, curriculum, fee structure, teacher qualification, salary etc.

I.T.S Engineering College was established in 2006 as a self-financed institute.

# 1.2.5 Does the college provide additional skill oriented programmes, relevant to regional and global employment markets? If 'yes' provide details of such programme and the beneficiaries.

Yes, the college provides additional skill oriented programmes which help the students in getting the jobs at various types of industries including MNC's/ Public Sectors.

The details of the programmes are given in the following table:

S.No	Programme Title	Programme Description	Domain	Beneficiaries student/Faculty
1	PLC and SCADA	One year course on	Industrial Automation	or both Students
	training	weakly basis for 3 <sup>rd</sup> year students on Industrial Automation conducted by Rockwell Autmation	(EEE/ ECE)	Students
2	Persoality	Personality	Management	Students
	Development Program	development classes are conducted for all 2 <sup>nd</sup> , 3 <sup>rd</sup> and Final year students to enhance their soft skill, professional communication and aptitutde. The program includes Interview techniques, group discussion, Aptitude test, reasoning etc.	(EEE/ECE/ME/CSE/IT)	
3	Standard Training Assessment and Reward (STAR) programme	This programme is offered by Indian Institute of Skill Development Private Limited (IISD) (Gurgaon). IISD is the training partner of National Skill Development Corporation (NSDC), Government of India. The basic objective	Mechanical	Students

	1	1		1
		of the programme is		
		to provide a quality		
		training programme		
		to our B.Tech third		
		year students with		
		industry experts so		
		that the students can		
		be prepared for better		
		placement in		
		manufacturing		
		,automobile sector		
		and process industry		
		through		
		standardization in the		
		certification process.		
4	CAD/CAM Training	LeLogix Design	Mechanical	Students
-		Solution Private	Wicchanicar	Students
	programme	Limited, Greater		
		Noida offers campus		
		training program on		
		Engineering design		
		and Analysis		
		software like		
		SolidWorks / Pro		
		Engineer		
		(Creo 2.0) and		
		ANSYS to our		
		B.Tech third year		
		•		
		students. Through		
		this training program, students are able to		
		get first class skill		
		upgradation		
		through theory and		
		hands on training on the latest		
		developments in		
		fields of Engineering		
		Design(Product		
		Design and 3D		
		Modeling). Since		
		this Training program		
		is Industry oriented,		
		therefore it will help		
		the students in getting		
		jobs in automobile,		

		manufacturing and other related industries.		
5	MITA .Net	To improve the skill in Microsoft .net framework and associate languages, conducted by ATS Academy, Noida	Information technology (CSE/IT)	Students
6	Course on C/C++/ Java	To strengthen object oriented skill of students	Information technology (CSE/ IT)	Students

1.2.6 Does the University provide for the flexibility of combining the conventional face-to-face and Distance Mode of Education for students to choose the courses/combination of their choice? If 'yes', how does the institution take advantage of such provision for the benefit of students?

No

#### 1.3 Curriculum Enrichment

# 1.3.1 Describe the efforts made by the institution to supplement the University's Curriculum to ensure that the academic programmes and Institution's goals and objectives are integrated?

College strictly follows university curriculum and ensures that the academic programmes and the college goals/objectives are integrated. In addition to that the college supplements the university's curriculum through imparting some special courses like PDP/Technical Writing/technical sessions to enhance the technical knowledge as well as the personality of the student. Online quizzes, guest lectures, seminars, CCP classes are conducted by the college to supplement the university's curriculum. Different departments also conduct various certification courses to cope with technical advancements in addition to curriculum. Students are also given exposure of latest technological development.

1.3.2 What are the efforts made by the institution to modify, enrich and organize the curriculum to explicitly reflect the experiences of the students and cater to needs of the dynamic employment market?

To improve the employability of our students college has taken the following initiatives.

- Frequent industrial visits are organized to provide first hand exposure of various processes, and current trends of the industry.
- Technical sessions are organized to improve/ enhance the technical ability of students.
- Industry entrepreneur are welcomed and the student's interaction with them is organized in the form of guest talk, workshops etc.
- Alumni meet provides a platform where the college alumni share their knowledge and experience to uplift employment possibility.
- PDP sessions are conducted to improve the personality of students.

# 1.3.3. Enumerate the efforts made by the institution to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum?

I.T.S Engineering College believes that education sector plays a vertical role in nourishing the roots of development that fosters growth to the nation. Our national investment strategy is based

on the concept of uplifting the poors and <u>improving peoples lines and sleazing the essence</u> of human touch through our corporate culture.

In the light of this I.T.S Engineering College recognized its responsibility toward the society and constitute Corporate Social Responsibility (CSR) cell to foster growth amongst the neglected sector of our society.

Environmental education, human values/behavior is mandatory part of curriculum and taught by experts/ faculty to encourage the students towards their responsibilities to nation and nature. Rain water harvesting technique is used by the college to recycle the rain water.

Ragging free environment is provided by the college to develop a friendly relation between seniors and juniors.

Some of the activities performed by CSR Cell are as following:

#### **Workshop on Cancer Awareness:**

I.T.S Engineering College's CSR Cell organized a workshop on cancer awareness on 2<sup>nd</sup> April 2013 for female students and faculty members of the institute. Aim of this workshop was to spread awareness on cancer and to prevention.

In this workshop Dr. Deepika, oral cancer and breast cancer expert, from Indian cancer society, explained the growing cases of Brest cancer and other form of cancer prevalent among Indian women.

#### Safai Abhiyaan

The CSR Cell of I.T.S Engineering College on 17<sup>th</sup> April 2014 emphasized the importance of cleanliness on the eve of Dr. Ambedkar Jayanti. Fourteen students from different streams started cleanliness drive in different areas at Knowledge Park-3.

## 1.3.4 What are the various value-added courses/enrichment programmes offered to ensure holistic development of students?

- Moral and ethical value
- Employable and life skill
- Better career options
- Community orientation

#### Moral and ethical values

The institution has constituted a Corporate Social Responsibility Cell (CSR) to foster growth amongst the neglected sectors of our society. The institute believes that the education sector

plays a vital role in nourishing the roots of development that foster growth of the nation. Every little step of CSR can have a great impact over the society directly and indirectly as well.

#### Employable and life skills.

The institute offers various value added courses and programs in different departments. Mechanical Engineering Department has its own Project & Research Center for Industrial CAD Training Programme and an Industrial Training Program for the students of B. Tech 3rd year being undertaken by Indian Institute of Skill Development (IISD) Pvt. Ltd under the aegis of National Skill Development Council (NSDC). Similarly, Computer Science and Engineering Department added a Microsoft IT Academy Program whereas the Electrical and Electronics Engineering Department along with Electronics and Communication Engineering Department conducted a training program on PLC & SCADA with coordination of S. Chand Edutech and Rockwell Automation Pvt. Ltd. These value added courses greatly enhances the employability and provide opportunities of students in the Industry.

#### **Better career options**

The institute has developed a mandatory Personality Development Schedule starting from the first year itself. The program is based on identifying and improving the skills that need to be enhanced in the student right from the beginning. This proactive approach has enabled them to identify and follow appropriate career and acquire skills so that they can face challenges in the real world. The students are being trained for various skills and the modules are being implemented keeping in mind the needs of the students. In pre-final years, focus is being laid on effective communication, time management, building positive attitude, mannerism and etiquette, body language, memory building, managing relationships and many more things. Towards the final year, the students are trained in areas like group discussions, personal interviews, delivering presentations, resume building, handling stress and so on. Group discussions, Essay writing, recitation of poetry etc., contests is held at regular intervals in the college. It is a regular practice of the institution to invite expert resource persons to conduct workshops on the development of communication competence among the students. Students are also allotted the different responsibilities in organizing various events and activities such as cultural programs, competitions, seminars, workshops etc. In this way they improve their team building and organizational skills.

#### **Community orientation**

The institution has a Corporate Social Responsibility Cell (CSR) which regularly visits surrounding areas to promote the importance of cleanness of our surroundings. CSR Cell organized a workshop on "Cancer Awareness". MBA Department conducts a workshop on UDAY- Awaking India- RISE STEP OUT AND VOTE. The institute participates in community services/development activities like organizing blood donation camps periodically with the help of ROTARY club New Delhi.

## 1.3.5 Citing a few examples enumerate on the extent of use of the feedback from stakeholders in enriching the curriculum?

Institute on its own cannot directly enrich the curriculum being affiliated to the university. However, the feedbacks are taken from stakeholders and recommendations are forwarded to the university through Board of Studies. Feedbacks to enrich the curriculum are also taken from companies, students, alumnis, academic advisors and expert speakers invited time to time throughout the year. In order to enhance the quality of education imparted by the faculty the college takes the online feedback of students in structured manner. These feedbacks are analysed to get insight regarding the suitability of current teaching methodology and to identify the critical changes required to increase the quality of education. The Corporate and Resource Cell (CRC) also take the feedback from the students to increase the competency of the students for employability.

## 1.3.6 How does the institution monitor and evaluate the quality of its enrichment programmes?

College monitors & evaluates the quality of their enrichment program by taking feedback from students and attendees. The feedback suggestions are incorporated in the future programs. The quality of enrichment programs is also reflected from the increase in placement and results statistics. The IQAC of the college monitor the suitability of enrichment programme as per the current need of the industry. The Director, Head of Departments and other senior faculty members meets periodically to assess the quality and overall impact of the various enrichment programmes. The CRC also provides vital inputs to be included in enrichment programme so that the employability of students in industries can be increased.

#### 1.4 Feedback System

### 1.4.1 What are the contributions of the institution in the design and development of the curriculum prepared by the University?

Some faculty members of the college hold posts at Board of studies at the university level, and they are invited in the meeting to discuss the issues in the design, changes, or reformation of curriculum. These faculty members also take the feedback from the concerned department of the institute and put forwards them in the meeting.

# 1.4.2 Is there a formal mechanism to obtain feedback from students and stakeholders on Curriculum? If 'yes', how is it communicated to the University and made use internally for curriculum enrichment and introducing changes/new programmes?

Yes, the college takes the feedback from its stake holders in planned manner. The feedback on the students is obtained at the end of each sessional exam and the suggestions for improvements are communicated to the Director. The college encourages various stakeholders to give their feedback on different aspects of the college including enrichment programme, placement and value added courses offered by each department. The college collects feedbacks both online and communication in the form of questionnaires to analyze and develop areas of improvement from it.

### 1.4.3 How many new programmes/courses were introduced by the institution during the last four years? What was the rationale for introducing new courses/programmes?)

In recent years, the college has introduced two post Graduation courses namely M. Tech (CSE) in 2012 & M. Tech (ECE) in 2013 and one under graduation course namely B.Tech in Civil Engineering in 2013. The college has well defined infrastructure & competent/ qualified faculty who efficiently full-fill the requirements of PG Courses.

#### 2. Criterion II - Teaching-Learning and Evaluation:

#### 2.1 Student Enrolment and Profile

2.1.1 How does the college ensure publicity and transparency in the admission process?

#### **Publicity**

- The college publishes the annual admission brochure and leaflet.
- The admission brochure is also available on the college website
- The advertisement for admission is given in local/regional / national News Papers.
- The college displays Posters, Banners and hoardings at different locations in various cities to attract the meritorious students seeking for the admission.
- All enquiries about the admission is handled through telephonic talk, Website, and personal visit.
- The College gives the information to the affiliated University about the details of courses and seat intake before the commencement of admission process.
- The college has their dedicated page in social media like Facebook, etc which is regularly updated.
- College is in regular touch with Alumni and informs them about all the activities related to placement and other technical events.

#### **Transparency**

- The Govt. of Uttar Pradesh, Technical Education Department, has consented for the
  constitution of Central Admission Board (CAB) under the Chairmanship of the Vice
  Chancellor, Uttar Pradesh Technical University, Lucknow to supervise and control the State
  Entrance Examination herein after referred as UPSEE being conducted by Uttar Pradesh
  Technical University, Lucknow.
- The CAB has absolute rights for conducting UPSEE, and to decide about modalities of admissions and allotment of seats. The jurisdiction of CAB extends to colleges / institutes affiliated to UPTU, Lucknow. The CAB is authorized to take every decision regarding conduct and admissions through UPSEE.
- The University conducts the on-line counseling for the successful candidates of the entrance examination and the whole process is transparent from the very bottom-line, i.e. students to the college authority.
- Students can fill up the choice of stream followed by online registration.

- I.T.S Engineering College adheres to the guidelines and rules as stipulated by the state government, which inherently has transparency, access, equity and social justice through its quotas for various reservation categories.
- 2.1.2 Explain in detail the criteria adopted and process of admission (Ex. (i) merit (ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other) to various programmes of the Institution.

The following criteria and process has been adopted by I. T. S Engineering College for admission

#### **Admission Procedure:**

#### **Under Graduate Course (B.Tech)**

The admission of the candidate is subjected to the guideline provided by the Uttar Pradesh Technical University, Lucknow

- 85% Students are admitted through Uttar Pradesh State Entrance Examination (UPSEE)
- 15% Students are admitted under Management Quota subject to the merit made on the basis of UPSEE Rank, AIEEE Rank and the marks obtained in PCM.
- 20% students of approved intake are admitted through Lateral Entry in 2<sup>nd</sup> year.

#### Second Year (Lateral Entry) of B. Tech.:

- Lateral entry in B.Tech. for Engg. Diploma holders or B.Sc. Graduates with Mathematics as
  one of the subject at XII standard in third semester (second year), is open only in the
  institutions affiliated to UPTU, Lucknow.
- Candidates who have passed three years Engg. Diploma from an Institution located in U.P. with minimum 45% marks (40% for SC/ST) recognized by the Board of Technical Education, U.P., in any branch of Engineering are eligible for admission to Second year in any branch of Engineering / Technology.
- Candidates who have passed three years B.Sc. degree and passed XII standard with Mathematics as one of the subject' from any recognized University with minimum 45% marks (40% for SC/ST) in aggregate, are also eligible for admission to second year in any branch of Engineering / Technology.

#### **Post Graduate Course (MBA):**

85% Students are admitted through UPSEE, MAT and CMAT. The Selection Process is through a Group Discussion & Personal Interview conducted by the College for student. 15% Students are admitted under Management Quota by the candidates who have passed the qualifying examination with 50% and above marks on the merit out of the application received.

#### **Post Graduate Course (M.Tech):**

- U.P. Technical University will permit admission and award M.Tech. degrees to only such courses those are duly approved by All India Council for Technical Education (AICTE).
- Admission to M.Tech. First Semester is made as per the rules prescribed by the Academic Council of the University.
- Admission on migration from any other university to the university is not permitted.
  However, a student of affiliated institution/college enrolled in any other university may be
  allowed to migrate in the University provided that he/she fails. He/she will continue his/her
  study in the same institution/college where he/she was previously studying.
- Reservation in admission to an M.Tech. course shall be governed by the AICTE/State Government/ Central Government rules. Where such rules are at variance with each other, the decision of Vice-Chancellor shall be final.
- 2.1.3 Give the minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the college and provide a comparison with other colleges of the affiliating university within the city/district.

Course	Stream	Eligibility Criteria
Under Graduate	B. Tech. (CSE, ECE, EN,ME,CE)	10+2 standard or equivalent with minimum of 45% marks in Physics, Chemistry and Mathematics taken together (40% for Reserved Category candidates); being compulsory subjects with pass marks in each of those individual subjects. For Decentralized Monitored Counseling (against drop out vacancy) conditions remain same (preference will be given to Rank holders).
Post Graduate	MBA	A candidate must have passed Bachelors degree course of three years minimum duration from any recognized Indian University; or its equivalent, recognized by A.I.U securing minimum 50% (45% for SC/ST) marks in aggregate.

	M.Tech (CSE,ECE)	Eligibility for admission shall be as per AICTE norms/guidelines. However, in the affiliated Institutions / Colleges where eligibility for admission in the existing courses has 60% marks in Graduation.
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**Note**: The above mentioned criteria are valid for all colleges under Uttar Pradesh Technical University, Lucknow.

## 2.1.4 Is there a mechanism in the institution to review the admission process and student profiles annually? If 'yes' what is the outcome of such an effort and how has it contributed to the improvement of the process?

Yes, the college has adopted a mechanism to review the admission process and student profile. The admission process strictly follows the directives given by the State Government. In addition to that college has an Admission Cell to review the admission process and student profile annually. The Admission Cell of the College collects and provides the detailed information about the students. The college creates individual files for each student containing information regarding his/her academic performance, counseling and disciplinary action taken along with overall profile of the student. The adoption of this practice helps the college to modify and restructure its admission related policies so that meritorious students from different segment of the society can be attracted for admissions.

- 2.1.5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate/reflect the National commitment to diversity and inclusion.
- SC/ST
- OBC
- Women
- Differently abled
- Economically weaker sections
- Minority community
- Any other

The college is committed to provide equal opportunity for the students belonging to the economically weaker and disadvantaged sections of society. The college helps them by offering scholarships based on their performance in academics, sports and culture. The admission process is totally under the control of State Government and the college strictly adheres to the various

provisions laid by the University for this purpose so that a uniformity and equity can be created among the above mentioned sections of the society. In addition to this the college provides all necessary support so that the students from SC/ST, OBC, Minority and Economically weaker sections can avail the maximum benefit of scholarships provide by State Govt. and the Central Govt.

2.1.6 Provide the following details for various programmes offered by the institution during the last four years and comment on the trends. i.e. Reasons for increase /decrease and actions initiated for improvement.

**Details for various programmes** 

Program		n 2013-14		2012-13		2011-12		2010-11					
		NOA	NSA	DR	NOA	NSA	DR	NOA	NSA	DR	NOA	NSA	DR
	CSE	165	117	98%	169	126	100%	136	114	95%	140	120	100%
UG	ECE	125	77	64%	132	124	100%	102	88	97%	95	91	100%
	EEE	128	64	53%	129	122	100%	65	56	93%	65	60	100%
	ME	220	153	85%	150	125	100%	145	115	96%	75	60	100%
	MBA	40	21	18%	65	50	83%	67	57	95%	80	59	98%
PG	CSE	20	15	83%	22	10	NA	NA	NA	NA	NA	NA	NA
	ECE	10	2	11%	NA	NA	NA	NA	NA	NA	NA	NA	NA

## NOA: Number of Applications; NSA: Number of Students Admitted; DR: Demand Ratio Reasons for increase / decrease

- The admitted strength in Engineering branches like Computer science & Engineering,
   Electronics & Communication Engineering and Electrical Engineering is found to be consistent in last four years.
- The students mostly select the colleges based on the surrounding locality and placement trend.
- At present admitted strength of Mechanical Engineering Department is found to be increasing mainly due to inclination of students and their guardians towards core engineering.

#### **Actions initiated for improvement**

- More advertisements are given in leading news papers. Emphasis has been given for Campaign through social media.
- Common placements activities are organized in which students of different colleges are participating thereby promoting the college in the concerned student community.
- Organizes Awareness programmes
- Organizing Seminar / Conferences / Workshops on various fields
- Thrust has been given to strengthen the training and placement activities of the college.
- The college is promoting different social activities in the nearby location which also create awareness about the college in society.

#### 2.2 Catering to Student Diversity

## 2.2.1 How does the institution cater to the needs of differently-abled students and ensure adherence to government policies in this regard?

The college completely follows the government policies, rules and regulations regarding the needs of differently-abled students. The seats are reserved and offered according to the government policies and rules at the time of admission. No such student presently exist, however adequate and necessary arrangements are there for such students such as ramps and elevator facility.

## 2.2.2 Does the institution assess the students' needs in terms of knowledge and skills before the commencement of the programme? If 'yes', give details on the process.

Yes the college assesses the students' need in terms of knowledge and skill before the commencement of the programme because of different exposure level of students due to different socio-economic backgrounds. The lack of proficiency in English language prohibits the students from effective communication. The students are generally weak in Mathematics, Physics and Chemistry due to which they are not able to apply the concepts for engineering problem solving. The college emphasizes the students to attend the personality development classes for their holistic development. Special classes are organized for weak students at the end of the week besides the regular classes so that these students can gain adequate knowledge to become at par with other students.

The college also conducts the orientation programme to make the students familiar with rules and regulations of the college. Orientation committee is formed which consists of the senior and experienced faculty members of the college.

## 2.2.3 What are the strategies drawn and deployed by the institution to bridge the knowledge gap of the enrolled students to enable them to cope with the programme of their choice? (Bridge / Remedial / Add-on / Enrichment Courses, etc.)

To bridge the knowledge gap of the enrolled students the HODs of all departments along with senior faculty members interacts with the students to understand the various academic difficulties of students. Based on their observations and feedback from the students the concerned authority take necessary action in terms of number of classes, extra classes or special classes for students on those specific subjects.

**Bridge course:** Bridge courses are being conducted for 10 days at the beginning of the semester by the faculty in which the fundamentals of subjects like Physics, Chemistry, C- programming etc. are taught by the concerned faculty.

**Remedial courses:** The College conducts remedial classes for the improvement before introducing the syllabus prescribed by the University for the respective courses. The college also provides 10 days remedial classes for revision of the core subjects. PDP classes are also being organized for the overall development of the students so that they can enhance their English communication and can gain all those personality traits requires for success in corporate world.

### 2.2.4 How does the college sensitize its staff and students on issues such as gender inclusion environment etc.

All possible measures are taken to educate staff and students on issues of gender inclusion and environment. This is achieved through a series of planned gender sensitization programmes. This includes poster displays and organizing seminars/debates on women rights etc. The college has a provision for Girls Common Room to provide opportunities for socialization so that they can utilize their leisure time fruitfully. The college has also constituted a Grievances Redressal Cell, Internal Complaints Committee, Anti Ragging Squads etc. so that adequate action can be taken to sensitize its staff and students on above mentioned issues.

Environmental Science is one of the papers in the curriculum of first year students of B. Tech., MCA and MBA programme. In which various issues such as environmental pollution, ozone depletion, deforestation, global warming, wildlife extinction etc are discussed.

Through the continuous efforts of students the college has significantly reduced the use of plastic. An effort has been made to segregate the non-degradable and biodegradable wastes at source by placing bins of different color codes so that a clean and eco-friendly campus can be maintained. The college encourages the students and faculty members for the productive use of electrical appliances, instruments and devices for the effective utilization of the electricity.

Green belt plantation initiative is taken by the college to make the campus greener. Rain harvesting technique is used to recycle the rain water and solar plant is used to generate the electricity in the campus. All these initiatives are used to make campus greener and eco-friendly. The Corporate Social Responsibility (CSR) Cell actively participates in afforestation and greening programmes in the campus and community which also promotes their social responsibility.

The college ensures that by the time the student finish his/her education in the college, he attains all these specified attributes. The faculty members of the college work rigorously throughout the academic year to enable the students to imbibe the valuable lessons. The faculty sensitizes students towards inclusive social concerns, human rights, gender and environmental issues to make them sensitive, sensible, useful and conscientious global citizens. Inspired by this one of our students has founded an NGO named DAASTAN for the benefit of underprivileged persons.

### 2.2.5 How does the institute identify and respond to special educational /learning needs of advanced learners?

The college identifies the advance learner's and the intelligent students on the basis of their merit as well as their performance in the internal and external examinations. The colleges encourage such students by assigning them innovative study projects and make them participate in various competitions. They are also the provided the extra books, advance study material and extra library facilities. The college also provides software tools like MAT LAB, Rational Rose, MS Project, Computerized Universal Testing Machine Lab etc. for the students.

Various expert talks are organized by the college on advancements of technologies such as mobile application development, microcontroller, Aerodynamics etc. **TECHFEST** are organized by the college in which students from different institutions participate and present various working prototypes based on their innovative thinking.

The students are provided motivational talks and training by resource persons form academic/industry to encourage them to strengthen their skills to become effective in their own learning process.

In every semester meritorious student are awarded and financial support is provided by the college. The twenty-four hours leased line facility is also provided to provide them vast source of knowledge through web. These students are encouraged to participate in various extracurricular activities.

2.2.6 How does the College collect, analyze and use the data and information on the academic performance (through the programme duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc.)?

College collect, analyze and use the data on academic performance of the students in following ways:

- 1. In each semester two faculties are appointed as Class Counselor for each class. The preference is given for faculties taking subject in this respective class.
- 2. Class Counselor identifies such students by analyzing their performance in internal assessment and their previous semester University result.
- 3. The flexibility in fees deposition is given to the students who are economically weak. The college provides information about government aids and scholarships.
- 4. Special classes are conducted for the students who are slow learners including linguistics.

#### 2.3 Teaching-Learning Process

## 2.3.1 How does the college plan and organize the teaching, learning and evaluation schedules? (Academic calendar, teaching plan, evaluation blue print, etc.)

The process is as follows:

- The college prepares the academic calendar at the beginning of the semester which is in concurrence of the University calendar. The academic calendar includes the schedule for the following:
- 1. Classes
- 2. Holidays
- 3. Examination Schedule
- 4. Seminars/Conferences/FDPs
- 5. Sports and other extra curricular activities
- 6. Annual Function
- The concerned department conducts the meetings of faculty and discusses the syllabus of the
  program and calls the subject preferences from the faculty. Using this, HoD allocates the
  subject load on the basis of faculty's preference, previous performance, experience and
  expertise.
- The faculty prepares course file which includes detail work plan, Notes and other study material, experimental write ups, previous year University question papers, assignments etc.
- The file is evaluated by concerned HoD.
- The students are informed about time table and academic calendar well in advance.
- The students and other stake holder, feedbacks are collected periodically when teaching is in process and concerned faculty uses the same to meet the requirements.
- College conducts sessional examinations twice in each semester in which the progress of students is evaluated and the feedback is given to their parents through Class Counselors.
   Class Counselors further councils the students about their academic performance.
- College organizes various co curricular and extra curricular activities to supplement the curriculum.
- HODs along with the faculty members analyze the semester results to find the reasons for deviation from the desired target. Action plan to control this deviation is discussed and the information is sent to the Director for proper action.

#### 2.3.2 How does IQAC contribute to improve the teaching learning process?

The IQAC helps to channelize the resources of college to achieve better coordination among the various stakeholders of the college and therby enhancing the total quality of education imparted by college. The IQAC contribute to improve the teaching learning process in following manner:

- It encourages the faculty members to adopt methods for participatory teaching and learning process.
- The feed back responses from students, parents, and other stake holders on quality related issues help the college to identify appropriate remedial action to be taken.
- It disseminates the information on various quality parameters to be adopted by the college to enhance the effectiveness of teaching.
- It organizes inter and intra college workshops, seminars on quality-related themes so that faculty can adopt good practices.
- It develops and maintain institutional database through MIS for enhancing institutional quality.

## 2.3.3 How is learning made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students?

Based on the assessment of the needs of the students, college plans a wide spectrum of activities like annual Technical Paper Presentation contest, Technical Quiz etc. The organization and execution of all these programmes actively involve the students and contribute to the overall development of their personality.

College adopts the following strategies to cultivate life skills in the students:

- Developing communication & presentation skills.
- Assigning mini projects to the students and provides guidance.
- Organizational ability is developed through departmental association events and involving them in the planning and execution of annual paper presentation contests, Technical Quiz etc.
- Educational tours to different industries are carried out for the students by the college.
- For acquisition of knowledge and management of skills students are trained and encouraged to participate in paper presentations, seminars and prepare project proposals that carryout the extension of their learning.

- Students are motivated to apply their acquired knowledge by designing and fabricating working models and develop software etc.
- Students are encouraged to contribute technical articles to improve written skills.
- Conduction of seminars, Guest Lectures and Conferences so that the students may refer journals and reference books for additional information.
- Advising the final year students to become members of Professional technical societies.

## 2.3.4 How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators?

Regular assignments and project work related to both subjects and innovative topics are given to the students which stimulate critical thinking and creativity among them. Apart from the academic activities, students are given chances like planning, designing and managing various events by themselves including the responsibility of raising fund for the event. This helps them to develop leadership qualities and gain confidence. The college has initiated the following steps to encourage the above mentioned parameters among the students:

MoA has been signed with various organizations like LeLogix Design Solution Private Limited, Indian Institute of skill Development Private Limited (under the aegis of National Skill Development Corporation, Gov. of India), Rockwell Automation, ATS InfoTech Limited (for Microsoft IT Academy) to impart critical thinking and creativity among students so that our of box thinking can be developed among them.

Students are encouraged to undertake industry based and socially relevant projects requiring engineering application so that their technical knowledge can be used to innovate certain new aspects. The college provides 'seed money' to the concerned project supervisor to motivate and identify such students.

To nurture and develop scientific temper among students, the college regularly invites eminent personalities from industries having expertise in certain domain so that students can acquire the latest information about the current technologies and to promote critical discussion on practical industrial problems.

The college has developed a Research Cell to identify and promote the research based activities among the faculties as well as students. The college has ISTE chapter membership and IEEE student branch chapter to give students a well established platform for acquiring scientific temperament.

The college has taken the first step towards promoting scientific and research based ideas by planning to publish its own international journal with ISSN number. Thus the students have the opportunity to disseminate their ideas among the scientific communities.

2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? Eg: Virtual laboratories, e-learning resources from National Programme on Technology Enhanced Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education, etc.

Efforts are made to maximize the use of such aids to improve the learning experience by the following means:

- The College Library has been fully computerized with help of "Alice for Windows" -the library automation software which facilitates the end user with his/her kind of requirement within shortest span of time.
- Digital library has been set up to enhance the teaching learning experience.
- The college has 73 printed (National and International) journals of different fields so that faculty can enrich their knowledge in specific area.
- The college has subscribed two reputed e-journals namely Springer Electrical, Electronics & Computer Science Engineering Collection (Back files from 1997 2014) with 149 journals and Springer Mechanical Engineering Collection (Back files from 1997 2014) with 49 journals. These journals provide adequate literature not only for teaching but also for research and other allied activities.
- College conducted a MISSION 10X programme to improve the teaching learning process and enhance the learning opportunities.
- College sponsored the faculty for membership of professional societies. The literature of these societies is made available to the students.
- Faculty provides online tutorials, notes, study material to the students.
- Availability of Wi-Fi campus and internet accessibility to all students.
- Use of multi-media projectors, overhead projectors for effective teaching.
- Professional Communication laboratory
- 2.3.6 How are the students and faculty exposed to advanced level of knowledge and skills (blended learning, expert lectures, seminars, workshops etc.)?

#### **Blended Learning**

Students and faculty visit industry from time to time where they are exposed to practical-knowledge and are informed about the new trends of industry. Industrial training is essential part of their curriculum which provides blended learning pattern. The faculties of each department regularly publish their research works in reputed National and International journals and college give full infrastructural and financial support in form of "seed money" to faculty members to carry their innovative project work.

#### **Expert Lectures**

All Departments of the college organizes expert lecture's delivered by persons from various industries, research organizations and from the field of academics at National and International level. Some of the prominent professors from foreign universities who have delivered expert lectures are Prof. M.Arif from School of Built Environment, University of Salford, U. K. These expert lectures not only help to identify those advanced areas in which research and innovation work can be done but also clarify the ambiguity about certain advanced topics prevailing in modern industries.

#### **Seminars & Workshops**

The College organizes FDP/ Seminars / workshops by eminent professionals in their respective areas in which the student, faculty and staff member actively participate to enhance the knowledge. The faculties are advised to attend the FDP / Seminars / Workshops conducted by the reputed institutions and universities. The college provides financial support to faculty for attending such programs. The faculties are participating in various national and international conferences organized by the different university/institution and other professional societies.

## 2.3.7 Detail (process and the number of students \benefitted) on the academic, personal and psycho-social support and guidance services (professional Counseling/mentoring/academic advise) provided to students?

The Tutorial System takes care of these aspects

- Academic: Slow learners and weak students are identified and are given extra time slots.
- Personal: The college administration implement all necessary steps to infuse those
  personality traits among the students required to achieve success in real world. Programs
  have successfully executed for enhancing the communication skill and other technical skill of
  the students to break the barrier which prohibit them from corporate world.

- Psycho-social: Students with Hindi medium background are advised to work in the Language
  Lab after college hours. A special class of remedial English is also conducted in Second year
  besides their Curriculum to improve their grammar and vocabulary so that a good proficiency
  in English can be developed.
- Class Counselors: For individual faculty 30 students have been allotted, who are responsible
  for each of the activities carried out by the student. One Counseling hour per week for the
  students is given in the Time Table of each semester. The class counselor identifies 2 Class
  Representative in his respective group and three meetings of Class Representatives are
  conducted by the Director every semester.
- All the students get the academic and personal guidance from the concerned Class Counselor.
- The Corporate Resource Cell (CRC) does professional counseling of the students.
- Corporate Social responsibility Cell (CSRC) activity also gives the social ethical awareness among students. It also imparts training for psycho-social support.
- The personality development Classes are organized in each semester. The course module for each semester has been designed for the holistic development of the student's in a progressive manner.
- HOD's also periodically counsels the students and gives them advice about student's specific issues.

# 2.3.8 Provide details of innovative teaching approaches/methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage the faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning?

The dedicated faculty members of the college aim to deliver their lectures in an effective manner to enrich the knowledge of the student's community. They continuously do research to evolve innovative teaching methodologies. Some of the innovative teaching methodologies adopted are:

- Extensive use of computers and internet facility for teaching
- OHPs, LCDs, videos etc. are used for teaching.
- Online availability of Journals/Magazines etc.
- Good collections of recently published books in library.
- Well equipped Language laboratories to improve the communication skills.

- Well structured lesson plans are prepared and revised for all theory and practical courses, scrutinized by HODs.
- Teachers are encouraged to publish their research work in Journals and present papers in Seminars and Conferences.
- College provides full financial support for attending Workshops, Conferences and FDPs etc.
- R & D is encouraged and efforts are made to obtain sponsored R & D and consultancy projects.
- The teachers distribute tutorial problems, assignments, lecture notes and other relevant materials to the students.
- Formation of different groups among the students that encourage peer learning, which help the students who are slow learner.
- The students are given many tasks such as group assignment, problem solving sessions and mini projects. These activities help the students to learn on their own about the recent developments that occurred in their field of study.
- Faculty prepares question bank for the students.
- Faculty uses collaborative learning and active learning.
- For conceptual understanding of the subject, special projects are given to the students.
- Faculty makes special laboratory set-ups to clarify the principles of the subjects.
- College deputes the faculty for teaching learning programs like WIPRO Mission 10X,
   MTAB Training etc.
- College makes arrangement to telecast special Webinars on the related topics.
- The impact of extensive use of electronic aids resulted in better presentations by students in national and international seminars leading to several awards. The web based lessons have made a tremendous impact on teaching-learning environment. The impact of such innovative practices is that the students are exposed to new modern methods of teaching and more and better understanding of the knowledge transferred to them within the allotted time. It helps to assess and improve the teaching-learning process that happens from the formative to summative period.

#### 2.3.9 How are library resources used to augment the teaching-learning process?

I.T.S Engineering College has a very spacious, modern library which is extremely rich in resources for learning, research and general awareness. Latest information in terms of text & reference books, magazines, periodicals, journals,CD's and videos have been procured for intellectual nourishment. Library has been fully computerized with help of "Alice for Windows" the library automation software which facilitates the end user with his/her kind of requirement within shortest span of time. The collection of books in the library covers almost all the thrust areas of engineering branches, Management, Applied Science and Professional English Language. Apart from text & reference books, reputed National and International Journals have been subscribed to provide latest information on various subjects of study. Besides, E-Resources under Library INDEST with annual subscription have been procured with 9 E-Resources-IEEE, ASME, Springer, McGraw Hill, Elsevier (Science Direct), J-Gate (Engineering & Management), ASTM Digital Library & EBSCO. The Library has a photocopy section, which provides photocopying facility to students and faculty.

College also provides book bank facility through which each student gets requisite books for all subjects according to academic requirements in each semester. This facility is additional to entitlement of books issued on library card.

Following data shows the richness of the college library:

Total Number of Books (Including Book Bank): 50,621

Number of national Journals: 72

**International Journals:** 1

**Number of Magazines: 6** 

Number of online Journals & Magazines: 198

**Number of Newspapers: 14** 

The college has a well stocked library and it used both by the students and teachers to augment the teaching-learning process.

- 1. Book bank facility is available to all the students. This library also has books written by world renowned authors which are issued to the students as per their demand.
- 2. The college also has digital library which gives an easy access to a vast pool of e-journals and so many other hugely sought after books.
- 3. The library has very flexibly timing for students. It is open for students residing in the college hostel till 8 p.m. everyday and during exam days it is operational till 10 p.m.

- 4. There is an arrangement for separate reading room for students.
- 5. The library also has monthly supply of various news papers and magazines.

## 2.3.10 Does the institution face any challenges in completing the curriculum within the planned time frame and calendar? If 'yes', elaborate on the challenges encountered and the institutional approaches to overcome these.

The academic calendar is planned to have a provision to accommodate unexpected holidays, which may hinder the course completion in time. The special classes are conducted after the regular classes and on weekends, if number of academic days is less in a semester. In order to complete the course within the stipulated time period the classes are arranged on Holidays and working Saturdays also. College makes arrangement to attend the special webinars on the different topics. In addition to this a well defined procedure has also been implemented at departmental level for the time bound execution of the course. Each faculty member prepares a lesson plan to deliver lectures so that the course can be completed as per the guidelines of the University. The HoDs of the department ensure that lectures are delivered as per the lesson plan. The progress of the course is monitored through self designed software and any lack from the desired target is reported to the HoDs through academic monitoring committee.

The extensive use of electronics aids resulted in better presentations by students/faculty at thus enriching the teaching learning environment. The use of information technology techniques also helps to achieve the completion of course within the stipulated time period.

#### 2.3.11 How does the institute monitor and evaluate the quality of teaching learning?

The college monitors and evaluates the teaching-learning quality through continuous process of various class tests, assignments, quizzes, projects, presentations and group-discussion. At the beginning of each semester the HoDs evaluates the course files of each subject prepared by concerned faculty members so that the quality of teaching learning can be controlled. The college also has a well defined mechanism of online feedback for evaluation of teachers. The end semester results of the university are analyzed to determine the average marks of each subject and the overall pass percentage. Faculty members achieving higher results are given incentives while faculty members not achieving the desired results are motivated to achieve better results.

#### 2.4 Teacher Quality

## 2.4.1 Provide the following details and elaborate on the strategies adopted by the college in planning and management (recruitment and retention) of its human resource (qualified and competent teachers) to meet the changing requirements of the curriculum.

The college follows the rules and regulations of AICTE and UPTU Lucknow for recruiting teaching as well as non teaching staff. At the end of each semester the requirement of additional faculty members for subsequent semester issend to the Director by the respective HoDs. The advertisement for recruitment is published in National and Regional newspapers along with the college website. The eligible candidates fulfilling the norms are called for interview. The interview panel comprising of Director, management representatives, HoD of the concerned department, external expert from reputed academic institutes and senior faculty member is constituted. Based on the performance of the eligible candidates the interview panel gives its report. Based on the panel report the Director in consultation with the management take final decision. The college has progressive and transparent human resource policies for providing monetary as well as non-monetary benefits to the faculties for their self development. The college has well defined appraisal policy which not only includes the academic performance but also the contribution of the faculty in other segments required for the overall growth of the college.

Highest Qualification	Professor		Associate Professor		<b>Assistant Professor</b>		Total		
	Male	Female	Male	Female	Male	Female			
Permanent Teac	Permanent Teacher:174								
Ph.D	5	0	8	3	4	4	24		
ME/M.Tech			3	1	87	26	117		
M.Phil									
P.G					16	18	34		
U.G									

2.4.2 How does the institution cope with the growing demand/ scarcity of qualified senior faculty to teach new programmes/ modern areas (emerging areas) of study being

### introduced (Biotechnology, IT, Bioinformatics etc.)? Provide details on the efforts made by the institution in this direction and the outcome during the last three years.

Efforts made by the institute to cope with the scarcity of qualified senior faculty to teach new programmes/modern areas are as follows

- The college sponsors the faculty members to attend FDP, Workshop and Seminars etc. organized by reputed institutes or industrial organizations.
- Research based activities are encouraged and proper incentives plan has been formulated to promote research and innovations in the college.
- To retain qualified faculty members, the college provides performance based increments.
- Eminent resource persons from the reputed Institutes and corporate sector are invited to deliver expert lectures to cope up with the latest trends and challenges of industry.
- The college encourages the faculty members for consultancy and well defined revenue sharing policy has been adopted to gain mutual benefit.
- Research Cell has been developed to identify the research areas and to promote the funding from external agencies.
- The college provides on duty leave for attending research related activities and encourages
  the faculty members to visit industries for gaining consultancy.

## 2.4.3 Providing details on staff development programmes during the last four years elaborate on the strategies adopted by the institution in enhancing the teacher quality.

a) Nomination to staff development programmes

#### Academic year 2013-14

Academic Staff Development Program	Number of faculty nominated
Refreshers Courses	10
HRD Programmes	0
Orientation Programmes	0
Staff training conducted by the university	2
Staff traning conducted by other institutions	12
Summer/winter schools, workshops, etc.	2

#### Academic year 2012-13

Academic Staff Development Program	Number of faculty nominated
Refreshers Courses	5
HRD Programmes	3
Orientation Programmes	0
Staff training conducted by the university	0
Staff traning conducted by other institutions	6
Summer/winter schools, workshops, etc.	1

#### Academic year 2011-12

Academic Staff Development Program	Number of faculty nominated
Refreshers Courses	5
HRD Programmes	0
Orientation Programmes	0
Staff training conducted by the university	0
Staff traning conducted by other institutions	4
Summer/winter schools,workshops, etc.	4

#### Academic year 2010-11

Academic Staff Development Program	Number of faculty nominated
Refreshers Courses	5
HRD Programmes	4
Orientation Programmes	0
Staff training conducted by the university	0
Staff traning conducted by other institutions	3
Summer/winter schools, workshops, etc.	3

b) Faculty Training programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching-learning

To enhance the teacher quality the college has make the following provisions

- The college provides study leave to faculty members for higher education.
- Seed money is provided to initiate the research/project based activities.
- The colleges have planned to publish its own international journal so that the faculty members can disseminate their knowledge of wider platform.
- The college always encourages the faculty to attend FDPs, Workshops, Seminars and Conferences to enrich their knowledge in concerned area of interest.
- Expert lectures of eminent personalities from foreign universities, reputed national institutes and Industries are periodically held in each department to assist the faculty members in sharpening their skills and upgrading their knowledge base.
- Each department of the college organizes National / International Conference in each academic session to promote the team work and organizational capability of the faculty members.

Faculty Training programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching learning

Academic Year 2013-14

Sr. No	Department	Period	Program
1	CSE		Microsoft IT Academy Program
		19.04.2013	Expert lecture on "Information Security & Cyber Laws" by Sh. Pavan Duggal, Senior Advocate Supreme Court of India
		07.08.2013	Expert lecture on "Data Structure & Computer Algorithms" by Dr. Sartaj Sahni a renouned Professor at University of Florida, USE
		08.08.2013	Expert lecture on "A Secure data sharing & query processing framework via federation of Cloud Computing" by Site Director & Professor Missouri University of Science, Missouri, USA
		13.08.2013	Interactive lecture on "Entrepreneurship & Startup for IT Graduates" by Dr. Amit Mittal & Mr. Vipul Jain, Co-Founders Gabbit Systems

			Guest lecture on "Mathematics: A Critical Thinking" by Ambassador Krishna Shetty,
		26.08.2013	A Deplomatic Mentor, Indian Council Of World Affairs, New Delhi
		17.12.2013	Faculty Workshop on Machine Learning & Bayesian Reasoning" by Mr. David Barbar, Professor in the Computer Science Deptt., University College, London
		20.12.2013	Invited talk on "How to do good research in Computer Science" by Alexander Gelbukh, Professor at National Polytechnic Institute, Mexico
2	ECE	Still going on	A training program organized by ROCKWELL AUTOMATION INDIA Pvt Ltd
			National Conference organised by ECE Department on "Recent Advances in Electronics and Communication Engineering-2014 for 2 days- 2014
3	EEE	Still going on	A training program organized by ROCKWELL AUTOMATION INDIA Pvt Ltd
4	ME		Manufacturing Process Skill Development in Automobile/ Automative Industry by Indian Institute of Skill Development Pvt. Limited under the aegis of National Skill Development Council.
		26th and 27th February 2013	Organised two days national conference on Industrial Problems on Machines and Mechanicsm under the aegis of Association of Machine and Mechanism (IPRoMM 2014)
		25th Januray 2014	Expert lecture by Dr.S.C.Bhaduri (Retd. Professor IIT Mumbai) on Engineering Teaching: Next few years
		29th August 2013	Expert lecture by Prof. M.Arif from University of Salfort (U.K) on Innovation through interdisciplinary approach
5	MBA	30.09.2013	AICTE sponsored National Seminar on "Scope of Financial Services and their Importance in
			Management Education" on 30 August 2013 at ITS Engg College Gr. Noida.
		28/9/12	Guest lecture on Applied Economics,Mr Anupam

	Mishra, GM, State Trading Corporation India Ltd,
	Transfer of the state of the st
5/9/2012	Guest lecture on Marketing, Mr. Nishant
	Maheshwari, Director, Neotric Business Solution
	Organised Internal FDP
12 - 17 July 2013.	
2013.	Ms. Neelam,on topics "Green Marketing"
	Ms. Anuja,"Viral Marketing"
12/7/2013	Ms. Pinki Singh,"Bivariate distribution of
(Friday)	correlation"
	Mr Ankur Srivastava,"Wealth Management and
	Financial Planing"
	M M M O C C C C
	Ms. Himani,"Employee Satisfaction and
17/7/2013	Motivation"
(Wednesday)	Prof L.K. Verma, "Importance of Negotiation in our
	daily life"
	Ma Manglahi "Cuasa sultuu usaa saasat '- ID"
	Ms. Meenaksni, "Cross culture management in IB"
(Wednesday)	

#### Academic Year 2012-13

Sr. No	Department	Period	Program
1	AS&H	24 <sup>th</sup> and 25 <sup>th</sup> Feb 2012	Organized two day Seminar on Applications of Signal Processing in Electrical and
2	CSE		Electronics Engineering.(ASPEE-2012).
3	ECE	24th and 25th Feb 2012	Organized two day Seminar on Applications of Signal Processing in Electrical and Electronics Engineering.(ASPEE-2012).
4	EEE	24th and 25th Feb 2012	Organized two day Seminar on Applications of Signal Processing in Electrical and Electronics Engineering.(ASPEE-2012).

5	ME	7th May 2013	Invited talk on "National Board of Accreditation" by Prof. A.K.Khare Ex. Prof
			Vice chancelllor of UPTU Lucknow
		19th March 2013	Expert Lecutre by Prof.M.M. Hasan (F/o
			Engg and Tech, JMI New Delhi) on
			I.C.Engine: Fuels and Combustion
		23rd August 2012	Expert Lecutre by Dr.Puneet Tandon (
			Professor Indian Institute of Information
			Technology Design and Manufacturing,
			Jabalppur ) on Gerneral trends in Mechanical
			Engineering
6	MBA		Organised Workshop on Financial Modelling
			Varun Mehrotra Director, Institute of
		14/9/12	Financial Studies,
			Mr. Anjan K Putatunda, RSM - South and
			North, Kawneer India (Division of Alcoa
		28/9/12	Indian Pvt Ltd.)
			Mr Shushant Agarwal,DGM-Finance,C&S
		5/9/2012	Electric Ltd.
			Mr Marc Ragsdale, President, Prospus
		19/9/12	Consulting Pvt Ltd
			Mr Rakesh Sharma, Head-HR &
		31/8/12	Adm, Motherson Sumi Infotech & designs Ltd

#### Academic Year 2011-12

Sr. No	Department	Period	Program
1	CSE	23th-24th March	Organized two day National
		2012	Conference on "Advancement of
			Computer & Communication Systems
			(CACCS-2012)", Sponsered by
			AICTE New Delhi.
2	ECE	22-23 <sup>rd</sup> April 2011	Organized two day National
			Conference on Microwave, Antenna
			and Signal Processing, Sponsored by

			DST New Delhi. MASP-2011.
		29-30 <sup>th</sup> September 2011	A Robotics Workshop on "Unmanned Aerial Vehicle". Organized by YOGIKI a Chennai based organization (Robotics Workshop).
3	EEE		
4	ME	27th February 2012	Expert Lecture on Laser System and applications by Prof. Ajoy Ghatak IIT Delhi
		21th February 2012	Expert Lecture on Rapid Prototyping and 3D Printing by Mr. Naveen Gupta from Geo Informatics Consultant Pvt Ltd
5	MBA	9/8/2012	Lecture by Motivation Speaker Dr. J Philip, NIET Kurukshetra
		9/26/2012	Guest Lecture on Application in Excel- Mr. Akshay agarwal
		27/9/12	Guest Lecture on Emerging Trends in Real estate by Mr. Dhirender Gaur, CEO, HiMS. Noida(Hawthrone Intellect Management Solution)
		5th October 2012	AICTE approved National Seminar on "Managing Challenges in HRM in Industrial Sector after Globalization"
		27/9/2011	Guest Lecture on topic "Strategic Business Plan" by Mr S.K.Mukherjee,GD, JK Organisation
		11/1/2012	Guest Lecture on topic "Finance Planning" by Mr. Rohit Singh Chairman and MD ,Indian Development Finance Corp Ltd
		20/1/2012	Guest Lecture on topic "Wealth Management" by Mr. Rohit Singh Chairman and MD ,Indian Development Finance Corp Ltd

#### c) Percentage of faculty

#### Academic Year 2013-14

Sr. No	Department	Invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies	Participated in external Workshops / Seminars / Conferences recognized by National/ International professional bodies	Presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies
1	CSE	50%	10%	10%
2	ECE	20%	40%	80%
3	EEE	0	60%	15%
4	ME	10%	25%	60%
5	MBA	14%	86%	71%

#### **Academic Year 2012-13**

Sr. No	Department	Invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies	Participated in external Workshops / Seminars / Conferences recognized by National/ International professional bodies	Presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies
1	CSE	0	10%	15%
2	ECE	20	40	40
3	EEE			25
4	ME	10	30%	30%
5	MBA	0	14	0

#### **Academic Year 2011-12**

Sr.		Invited as resource	Participated in external	Presented papers in
No	Department	persons in	Workshops / Seminars /	Workshops / Seminars /
		Workshops / Seminars /	Conferences recognized	Conferences conducted
		Conferences organized	by National/	or recognized by
		by	International	professional agencies

		external professional agencies	professional bodies	
1	CSE	20%	10%	10%
2	ECE	20	40	40
3	EEE			61
4	ME			
5	MBA	0	11	0

#### Academic Year 2010-11

Sr. No	Department	Invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies	Participated in external Workshops / Seminars / Conferences recognized by National/ International professional bodies	Presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies
1	CSE	20%	10%	10%
2	ECE	30	40	40
3	EEE			38
4	ME	10%	20%	
5	MBA	0	14%	14%

#### > Teaching learning methods/approaches

- Power point presentation using LCD projector is given by faculty for critical topics
- Extensive use of e-resources, journals and other periodicals
- Use of simulation for easier understanding of relevant topics

#### > Handling new curriculum

The newly introduced subjects are preferably given to experienced faculty member. Subjects are allotted to faculty based on their preference, specialization and prior performance in the subject. A detailed course file is prepared for each subject so that the subjects can be completed in well defined manner.

#### > Content/knowledge management

Faculty is encouraged to attend as well as organize Seminars and Conferences on recent topics to enrich their knowledge. The other platforms through which the faculty updates their knowledge are FDPs, research paper publications and review of scientific articles.

#### > Selection, development and use of enrichment materials

The college has Research Cell to promote the research and other correlated activities. Besides this expert lecture is organized at regular intervals in each department. Some departments have their own project lab to guide the students for developing indigenous ideas.

#### > Assessment

Student's feedback, the assessment by the concerned HoD, contribution of the faculty in the research activity and his involvement in the overall development of the Department are some of the critical parameters for the assessment of the faculty.

#### > Cross cutting issues

In order incorporate cross cutting issues like efficient energy utilization, environment protection, human values and ethics the college has different society to organize events related to these issues. The college has Corporate Social Responsibility Cell which is deeply involved in providing relevant solution to such problems with the financial aid from the college.

#### > Audio Visual Aids/multimedia

The class rooms of the college have the provision of using LCD projector. Some of the class rooms are equipped with LCD projectors and movable projector is used whenever the need arises. Each faculty member has been given a personal computer with internet connection so that maximum benefit of information technology can be gained. The college has good numbers of conference rooms equipped with all multimedia facility to organize classes, conferences and seminars.

#### > Open Education Resources (OER's)

The college promotes the faculty members to use the open education resources to enhance the quality of their lecture. The faculty provides e-copy of assignments, tutorials and other relevant things to students for their maximum benefit.

#### > Teaching learning material development, selection and use.

Each faculty prepare well documented course file before the beginning of semester. The course file is prepared with the aid of university recommended text books and reference books. The library of the college is not only equipped with all necessary books but also provide free access to E-journals comprising of vast engineering and research related articles. The expert lectures organized by the college also help to modify the content as per the need of the industries. The extensive use of information technology also helps in proper selection of teaching content so that the students can learn the topics more efficiently.

## 2.4.4 What policies/systems are in place to recharge teachers (e.g. providing research grants, study leaves, support for research and academic publications teaching experience in other national institutes and specialized programs industrial management etc.)

The college is committed for professional development of the faculty on continuous basis .The college has well defined policies to recharge the faculties. Faculty members can avail the facility of flexible time schedule and study leave for pursuing their higher academic programmes. The college has subscription of e-journals from Springer with wide coverage of each specialization to provide international literature base for their research work. Sponsorship is provided to each faculty members for attending FDPs, Conferences and Workshop related to their research work or areas of interest.

2.4.5 Give the number of faculty who receive award /recognition at the state, national and international level for excellence in teaching during the last 4 years. Enunciate how the institute culture and environment contributed to such performances/achievements of the faculty.

Nil, Several faculties of our college have been awarded 'best paper award' for presenting technical papers in Seminars/conferences that were conducted by external agencies.

2.4.6 Has the institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the teaching-learning process?

Yes, the college evaluates the faculty by taking inputs from students and external peers as follows.

- The students give the evaluation of the concerned teachers through online feedback system. Feedback is taken twice in a semester and used to continuously improve the teaching and learning process. The feedback is shared with each faculty member. Faculty members having excellent feedback are appreciated and the faculties whose feedback is below the average are counseled & advised to improve by the concerned HoDs. The college has meticulously planned to correlate the feedback given by the students with the incentive and promotion of the faculty members.
- The college always welcomes feedback from external peers such as alumni and parents to reorient its plan and policies for fulfilling its mission and objectives. The parameters which show a large deviation is controlled on the basis of feedback.
- These evaluations helps to identify an appropriate teaching style for faculty, promotes
  participative teaching learning ideology and helps to innovate better methods for teaching.
  Furthermore these feedbacks are also for development of lab facilities and identifying any
  specific need of the students for the development of the college.

#### 2.5 Evaluation Process and Reforms

## 2.5.1 How does the institution ensure that the stakeholders of the institution especially students and faculty are aware of the evaluation processes?

The regulations, curricula and syllabi of all the programmes offered by the college are available in the college website. The regulations contain the details of the evaluation processes. Further, the office of the Controller of Examinations has prepared a manual on the conduct of examinations and copies are available to all departments. The fresher are informed of the system of periodical tests and end-of-the-semester tests.

The evaluation process is instrumental to a student's personal and career development. Students appreciate an assessment of their academic performance and welcome constructive feedback. The internal assessment marks are awarded on the basis of students performance in the two internal tests conducted in each semester. We also follow the continuous evaluation methods in the classroom which is based on interaction in class, presentation, seminars, performance in assignments and practical.

To the Students: The students are given the programme schedule containing the timetable, academic calendar, internal test schedule, list of holidays etc. at the beginning of each semester. In the orientation programme conducted in the beginning of the odd semester, faculty briefs about the examination and evaluation methods followed in the respective disciplines to the students. As the students are aware that they are being evaluated continuously, good attendance and participation in the class is ensured. The internal assessment results are displayed on the departmental notice boards.

**To the Faculty:** The evaluation methods are discussed in detail in the Departmental meetings and the final decision taken is conveyed through circulars.

To the Parents and other Stakeholders: The parents are briefed about the evaluation methods followed in each discipline during the orientation inaugural program conducted every year.

## 2.5.2 What are the major evaluation reforms of the university that the institution has adopted and what are the reforms initiated by the institution on its own?

Being an affiliated college of Uttar Pradesh Technical University Lucknow, the Director/ Senior faculty member of the college attend all the meetings conducted by the University regarding the evaluation. The college implements all the reforms and suggestion prescribed by the University to enhance the effectiveness of evaluation. It is mandatory for the faculty to perform evaluation

work if the university deputes him/her for evaluation work. The university has decentralized the evaluation work for fast and accurate evaluation. The maximum and minimum number of copies to be evaluated by the examiners has also been fixed to minimize the error during evaluation process.

The college has adopted well defined parameters to effectively implement the reforms of the university. The evaluation process of the college has been automated through intranet facilities. The faculty can enter the daily attendance and marks obtained by the students periodically. The college conducts Pre University Test (PUT) of three hours to prepare the students for end semester examination.

#### **Evaluation Reforms by the University and by the College:**

The University constitutes a board of examiners separately for central evaluation of each category (for various engineering and technology disciplines) consisting of a Head Examiner, Dy. Head Examiner and List of Evaluators. And for practical subjects, the external examiners are appointed by the University while the subject teacher of the college will be designated as internal examiner.

The University also provides for revaluation of the answer scripts as well as supplying Xerox copies of the evaluated answer scripts. On the recommendations of HOD and Principal, the answer scripts of University examinations are revalued by the University. In case the student is not satisfied with the outcome of the revaluation or the marks obtained by him, university has a provision to go in for a CHALLENGE. However the marks obtained by the student will be the best of all the above.

The institution continuously reviews the evaluation process done internally and necessary changes as and when applicable/ required are implemented. Though only two internal assessments are required as per the norms of the affiliating university, the college also conducts three hours Pre University Test as per the pattern of the end semester examination conducted by the university. In addition to the above, regular assignments are also part of the evaluation process. Major evaluation reforms of the university are the project work/sessional examination/Group discussions and end semester examination.

### 2.5.3 How does the institution ensure effective implementation of the evaluation reforms of the university and those initiated by the institution on its own?

#### **University Evaluation**

The examination reforms of the university that are adopted by college are as follows:

- 1. Every faculty has a unique id which provides the college-University interface.
- 2. All the circular/notices regarding evaluation reforms are communicated to the college time to time.
- 3. Internal assessment as per evaluation scheme provided by affiliating university is done by the faculty of the college and same is online submitted to the university before the commencement of the end semester university examination.
- 4. The College has been the Examination Center as well as the Nodal Centre for End Semester examination of the University at both UG and PG level. The University appoints Center Superintendents for the smooth and peaceful conduction of End Semester Examination. The flying squad appointed by the university independently control and monitor the examination procedure and other operational activity related to examination and give feedback to the University.
- 5. Centralized Evaluation of answer sheets is conducted at different evaluation centers which are decided by the University.
- 6. University appoints the practical examiners for the assessment of students in practical subjects.
- 7. The result of students is declared by the University at the end of semester.

#### **College Evaluation**

- 1. Conducting an HoD meeting by the Director before the commencement of semester examination regarding the smooth conduction/implementation of examination rules, where every HoD give their suggestion on various aspects of examination and evaluation basing upon the previous examinations. This enables the further improvement in the subsequent examination and evaluation.
- 2. The Director or Centre Superintendent of the examination call a general meeting of all faculty members before the start of the semester examination for the smooth conduction/implementation of examination rules, where every faculty members are

encouraged to give their suggestions on various aspects of examination and evaluation based on their experience in the previous examinations.

2.5.4 Provide details on the formative and summative evaluation approaches adapted to measure student achievement. Cite a few examples which have positively impacted the system.

#### **Formative Assessment**

The University has provided guidelines for the formative evaluation approach to measure the students' achievement and the college strictly follows it by actively assessing the students on different parameters provided in the evaluation scheme.

Evaluation scheme decided by university as follows:

Sr. No	Particulars	Weightage of Marks
1	Sessional Marks	25%
	(Internal)	
2	Theory Marks	50%
	(External)	
3	Practical Marks	25%
	(Internal + External)	

Formative assessment of the student is done on the basis of assignments, presentations, industrial visits, class interactions, group discussions/viva-voce, workshops/seminars, inter college competitions, overall attendance and behavior of the student in the class during the session.

#### **Summative Assessment**

Summative Assessment takes place at the end of the academic session which is conducted by the college during the terminal test at the end of the semester. The assessment of students is done in the following ways:-

- 1. End Semester Exams
- 2. Practical Exams
- 3. Viva voce
- 4. Project work
- 2.5.5 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/programme? Provide an analysis of the student's results/achievements (Programme/course wise for last four years)

and explain the differences if any and patterns of achievement across the programmes/courses offered.

The college monitors and communicates the progress and performance of the students to them and their parents through email and the same is notified on the Notice Board. The information of short attendance in the class is communicated to the parents by respective class counselor through phone and by post also. The performance of the student is evaluated in terms of previous results, class test, assignments, attendance and their participation in the classroom activities as well as institute level activities. The results and achievements are communicated to their parents at the regular intervals. This information is also displayed on the notice boards and is also announced in the concerned class. The transparent evaluation system and good counseling by faculty deliver good results. The successes of these efforts are evident from the excellent academic quality and quality placement of the students in reputed companies.

2.5.6 Detail on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students (weightage for behavioral aspects, independent learning, communication skills etc.)

The transparency/weightage in the internal assessment is maintained strictly as per University rules and regulations. In order to maintain transparency, the answer sheets are distributed to the students after evaluation. After preparing the assessment report, it is submitted by the concerned faculty to Head of Department. The internal assessment is made by faculty members keeping in mind the following aspects/factors of the student's performance during the academic year:

- 1. Class Attendance
- 2. Class Assignments
- 3. Performance of the sessional exams etc.

In addition to all the above aspects, the behavior of the student in the class, overall response in class, independent learning and communication skill etc. are also taken into consideration to assess the student.

# 2.5.7 Does the institution and individual teachers use assessment/evaluation as an indicator for evaluating student performance, achievement of learning objectives and planning? If, yes provide details on the process and cite a few examples.

Yes, the college and faculty members use internal assessment /Evaluation as an indicator for evaluating student performance, achievement of learning objectives and planning. The internal assessment for students is performed as per the norms of the University. This is mainly based on three aspects such as assignments, class tests and attendance. The faculty evaluates the assignment and class tests and provides them marks according to their performance. The record of attendance is also maintained to give them marks according to their status. In addition to this the project work by the students also helps to assess the practical and technical knowledge of the students.

## 2.5.8 What are the mechanisms for redressal of grievance with reference to evaluation both at the college and University Level?

#### **Internal Assessments**

In case of grievance with reference to the evaluation of internal assessment, a student has to submit an application to the Head of Department of his respective branch and same is forwarded to Examination Committee of the college for subsequent actions.

#### **External Assessments**

In case of grievance with reference to external assessment, University has a provision of redressing such grievance. The concerned student can apply for revaluation/rechecking by filling a form duly forwarded through the registrar of the college within prescribed time period from the date of the announcement of the results.

### 2.6 Student performance and Learning Outcomes

### 2.6.1 Does the college have clearly stated learning outcomes? If 'yes' give details on how the students and staff are made aware of these?

The college has clearly stated learning outcomes mentioned in its Vision and Mission. These are made aware to students and staff through:

- 1. Vision, Mission and Objective of the college have been clearly displayed at various places of college such as college website, visitor lounge, faculty sitting area and seminar hall etc.
- Learning outcome of each individual program/department is derived from the Vision, Mission and Objective of the college.
- 2. Learning outcome of each individual subject, lab are derived on the basis of result or consequences of what was learned
- 3. Learning outcome of each individual subject/lab is stated on the course file maintained by the subject teacher.
- 4. These are also mentioned on the handbook given to student the day they join the college.
- 5. These are also conveyed in the orientation program held before the commencement of the program.
- 6. Conveyed to the student and staff in different training program.
- 2.6.2 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/programme? Provide an analysis of the student result/achievements (Programme/course wise for last four years) and explain the differences if any and patterns of achievement across the programmes/course offered.

College monitors and communicates the program and performance of students internally in the following ways.

- 1. Internal tests are conducted twice in semester and results are declared and displayed with in five days after the last examination.
- 2. On the basis of performance weak students are identified.
- 3. The information about the performance of weak students are informed to the parents by registered post.

- 4. Class counselor of each section telephonically communicates the performance of the student to their parents and also discusses the related issues.
- 5. The affiliated university assesses the performance of students on the basis of end semester examination result.

#### **Result Analysis**

Courses	2013-14	2012-13	2011-12	2010-11
B.Tech (CSE)	76.67	77.19	86.73	90
B.Tech (ECE)	69.51	78.82	84.38	85.96
B.Tech (EEE)	65.45	71.15	77.08	56.41
B.Tech (ME)	74.19	75.44	85.94	83.33

## 2.6.3 How are the teaching, learning and assessment strategies of the institution structured to facilitate the achievement of the intended learning outcomes?

The curriculum and evaluation scheme is provided by the affiliated University and the college strictly follows the same. The college has adopted the following strategies to facilitate the achievement of the intended learning outcomes.

#### **Teaching Strategies**

- Course file is prepared by each faculty after referring standard text books and reference books. The lesson plan is also prepared to complete the course within stipulated time period.
- The HoD regularly visits the classes to monitor the progress of course.
- The faculty regularly attends the FDP programme to enhance their knowledge.

### **Learning Strategies**

- The college provide very conducive atmosphere for learning. Based on the performance in class test the weak students are indentified and remedial classes are held for those students to enhance their learning capability.
- Library and computer lab working hours are scheduled keeping in mind the extended support these Departments can provide after regular class hours.
- Personality development classes and English proficiency classes are held to improve the communication of the students.

### **Assessment Strategies**

The regular class test and interaction of the students with teacher provide a platform for assessing their learning capability. The students are also assessed on basis of their performance in extracurricular activities. The project work and their participation in activities held by different technical societies of the college also help in their impartial assessment.

## 2.6.4 What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (quality Jobs, entrepreneurship, innovation and research aptitude) of the courses offered?

To enhance the social and economic relevance of the courses the college has taken the following measures/initiatives:

- Teachers provide the knowledge in such a manner that students are able to develop the basic ideas about their project work.
- College provides Communication skill development classes beginning from first year and the PDP Classes are introduced besides their curriculum from second year onwards.
- Different industry resource person are invited by various departments to motivate and guide the students about the emerging areas of industry.
- The Corporate Resource Centre (CRC) of the college plays an important role in shaping the careers of students by shaping their personalities to match the expectations of industry, aiding summer internships and finally guiding them to get placed in a company which fits their skills in best possible way.
- The CRC works hard to provide platform to the students where they can interact with the industry people and provide an interface with the industry people. CRC organizes on and off campus placement drives for students.
- The team works closely with every department to indentify individual needs of the students and thereby matching the skills with the prospective employers.
- College encourages to Faculty and students to become the member of different technical society like IEEE. IET, ISTE, CSI etc.
- College has set up advance labs like MATLAB, LAB-VIEW, VLSI (CAD Lab) etc.
- College has the PG program to supplement the research activity.
- College has planning to establish research cell.
- College organizes the program on entrepreneurship and IPR.
- Value added lectures on entrepreneurship skills are conducted.

- College organizes Blood Donation and tree plantation events etc.
- For innovation in research aptitude students are encouraged to undertake, participate in research projects, national seminar and conference.
- Special events organized by students.
- The college is dedicated for quality education which helps in branding our students as the best in the operational areas.
- The Corporate Social Responsibility (CSR) Cell of the College motivates students to participate in activities for social and community service.
- The quality education and research development activities have been contributing significantly in transforming socio-economic condition of the people.

### 2.6.5 How does the institution collect and analyze data on student learning outcomes and use it for planning and overcoming barriers of learning?

College has adopted the following procedure to collect and analyze data on student learning outcome.

College has two type of evaluation process one evaluation comprises of internal tests conducted by college and the other is final semester exam conducted by the university. The performance of the students is evaluated internally by taking Tutorials, Quiz, class test, viva-voce in the lab, assignments, group discussions and seminar presentations, mini and major project etc.

### College has taken following steps to overcome barriers

- Head of the Departments of respective departments analyzes all the results of class tests
  and end semester examination of all the subjects. The overall result is compiled and the
  outcome is discussed with the Director during the meeting for necessary action.
- Providing Question bank of all the subjects to the students.
- By showing answer books to students to make them understand their relative strengths and weaknesses.
- College strictly follows the instruction made by university that 75% attendance is mandatory for all the students to take end semester exam.
- Measures like remedial classes, assignments and extra classes are conducted for slow learners.

- Special classes are held for weak students in different subjects to improve their performance.
- Professional Communication classes are conducted to improve their oral, written and conversational skills to help them to cope up with the subject.
- The intended data is collected through the feedbacks from parents, alumni, experts from industry and the same is analyzed in order to overcome the barriers of learning.
- A technical session is conducted specially for third year students.

### 2.6.6 How does the institution monitor and ensure the achievement of learning outcomes

College monitors the performance of the students and faculty and ensures the achievement of the learning outcome in the following ways.

The curriculum provided by the university is organized and sequenced in outcome based approach that clearly specifies what students are expected to learn. College ensure that faculty, department are actively able to demonstrate and account for student achievement of learning outcome. As per university 75% of attendance is mandatory for any student to take the end semester exam. College strictly follows the instruction made by university. Sessional exams are conducted twice in semester and results are displayed on notice boards with in five days of last exam.

- Answer scripts are shown to students and solutions of sessional exam is discussed with them to analyze their mistake.
- Expert lectures, guest lectures, visiting faculty is provided by the college to bridge the gap between curriculum and recent advance. Assignments, quizzes, technical sessions are conducted to ensure the achievement of learning outcome.
- College ensures that faculty develops and identifies the knowledge and skills so that student should be able to demonstrate throughout the program.
- College encourages the student for summer training, internship programs.
- Online faculty feedback is conducted twice in a semester and corrective actions are taken on it.

2.6.7 Does the institution and individual teachers use assessment/evaluation outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning? If 'yes' provides details on the process and cite a few examples.

### Any other relevant process information regarding Teaching-Learning and Evaluation which the college would like to include.

Yes, the college uses assessment / evaluation outcomes as an indicator for evaluating student's performance. Students are assessed on the basis of their performance in the internal examinations and classroom/lab activity. The following parameters can be used as an indicator for student's performance

- 1. Effective Communication: College ensures the improvement in communication skills of the student by conducting the sessions of communication labs, general English, grammatical English etc. In addition, group presentation, posters presentation, power-point presentation etc. are also conducted by the college. College provides formal communication training. Students are able to communicate effectively, not only with engineers but also with the community at large.
- 2. Ethically and socially aware: College has some societies through which different programs are organized and students are able to understand about active citizenship, community engagement, global circular environment etc.
- **3. Reflective Learners:** College provides self assessment and work related learning to the students by conducting mock interviews, PDP sessions etc. College maintains links with Alumni via social networks and events.
- **4. Behavioral Ethics:** College conducts the PDP sessions for 2<sup>nd, 3rd</sup> and 4<sup>th</sup> year students to enhance/develop their personal, interpersonal skills.
- 5. Knowledge Driven: College promotes environment conducive for sharing their relevant knowledge and best practices. The college has the policy of nurturing people who have knowledge. Students gain knowledge in their domain and the college provide them the opportunity to apply this knowledge for solving real life problems.
- 6. Problem analyzer: Students are able to undertake problem identification, formulation and solution in the field of Engineering Sciences.
- 7. **Designing and development:** College ensures t students are able to design and develop the solution of the Complex real time engineering problems and enables them to utilize a systematic approach to design and development of solutions.
- 8. Leadership skills: Students are able to take the lead in any situation, professionally and socially.

### 3. Criterion III - Research, Consultancy and Extension:

#### 3.1 Promotion of Research

3.1.1 Does the institution have recognized research center/s of the affiliating University or any other agency/organization?

No

3.1.2 Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.

Yes the college has an active research committee. The committee is headed by the Director (Chairman). The composition of committee is as follows:

- 1. Dr. Ashish Kumar (Coordinator)
- 2. Dr. O P Chaudhary
- 3. Dr. Sanjay Mishra
- 4. Dr. Leena Arya
- 5. Dr. Manoj Kumar Gupta

Research committee regularly meets with the coordinator to discuss the plan required to improve the research profile of the college.

#### Recommendations

- 1. Faculty are encouraged to publish research papers in peer reviewed journals and international conference.
- 2. Members are advised to organize seminar/ FDP/ Conferences.
- 3. Post graduate students and some of the meritorious under graduate students are given opportunity to publish research paper, participate in ongoing research project etc.
- 4. Department are advised to submit research project to various funding agencies advertised time to time like DST. AICTE, BARC etc.

#### Impact of recommendations

- 1. The publications quality and number has increased compared to previous years.
- 2. The grants from external agencies to organize research activities have increased.
- 3. Some of research projects are in the submission stage.
- 4. The student's contributions have improved.

3.1.3 What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/projects?

• autonomy to the principal investigator: Yes

• timely availability or release of resources: Yes

• adequate infrastructure and human resources: Yes

• time-off, reduced teaching load, special leave etc. to teachers: Yes

• support in terms of technology and information needs: Yes

• facilitate timely auditing and submission of utilization certificate to the funding authorities: Yes

The college provides full support to the principal investigator for the completion of the project within the stipulated time period. The college maintains the record of all kind of transactions like grants, expenses, personnel involved, and other non-tangible items. The college facilitate faculty and students in research by providing them library facility and journals of National and International publishers.

## 3.1.4 What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?

Students are encouraged to participate in techfest/ events organized by other colleges, industry and research organizations where they learn about new technologies, ideas for research in recent advancements. Experts are invited to deliver talk on their research areas and faculty and students both are requested to attend and explore the possible avenues of research. B.Tech. projects having research flavor are promoted and rewarded in terms of publishing/implementation their work.

## 3.1. 5 Give details of the faculty involvement in active research (Guiding student research, leading Research Projects, engaged in individual/collaborative research activity, etc.

### Guiding student's research

The faculties are guiding dissertations of M.Tech programmes in Computer Science and Engineering and Electronics and Communication Engineering. Faculty supervises them in identifying the research problem, implementation, writing research papers.

### **Leading Research Projects**

Some of the faculty has submitted the projects to various funding agencies like DST, CSIR etc. for research grant.

### Engaged in Individual/ Collaborative research activity

Some of the faculties are pursuing their Ph.D from different universities like UPTU, JMI, ISM Dhanbad etc. They publish part of their research work in national/ international journals/ conferences.

S. No.	Name of Faculty	Department	Specialization	Activity
1.	Sandeep Kumar	CSE	Fractals & Data Mining	Individual research
2.	Ankur Saxena	CSE	Digital image watermarking	Individual research
3	Shweta Rathour	CSE	Network & Security	Individual research
4	Bhawna Gupta	CSE	Scheduling	Individual research
5	Vivek Tomar	CSE	Image Watermarking	Individual research
6	Vijay Shukla	CSE	Software Engineering	Individual research
7	Tarun K. Chugh	CSE	Security in MANET's	Individual research
8	Abhishek Verma	CSE	Audio Watermarking	Individual research
9	Dushyant Singh	CSE	Cloud Computing	Individual research
10	Dr. Manoj Kumar Gupta	CSE	Bioinformatics, Computational Biology	Guiding students
11	Dr. Leena Arya	ECE	Wireless Communication,Digital Image Processing	Guiding students
12.	Dr. Lokesh Bansal	ECE	Wireless Communication	Individual research
13.	Mr. Rashid Mahmood	ECE	Dieelctric Resonator Filter on DGS/EVG	Individual research
14	Mr. Ashish gupta	ECE	Signal Processing for VLSI	Individual research
15	Mr. Navneet Choudhary	ECE	Microstrip Anteena at VHF band	Individual research
16	Ms. Monika Bhatnagar	ECE	Microstrip Anteena	Individual research

17	Mr. Jugal kishore	ECE	Dieelctric Resonator Filter	Individual research
18	Mr.Yogesh Kumar Gupta	ECE	Active Integrated Anteenas	Individual research
19	Ms. Kalpana Hazarika	EEE	Reliability Engineering	Individual research
20	Mr. Noorul Islam	EEE	Energy Management	Individual research
21	Mr. L. Navin Rao	EEE	Power electronics	Individual research
22	Mrs. Gauri Katiyar	EEE	Soft computing techniques in character recognition	Individual research
23	Mr. Mohit Saxena	EEE	Energy Management	Individual research
24	Mr. Sanjay Yadav	ME	Thermal Engineering	Individual research
25	Dr.Sanjay Mishra	ME	Advanced Manufacturing Processes	Individual Research
26	Mr. Suresh Prasad	ME	Green manufacturing	Individual research
27	Mr. Arvind Kumar Tiwari	ME	Thermal Engineering	Individual research
28	Mr. Kamal Asif Khan	ME	Green Supply Chain Management	Individual research

3.1.6 Give details of workshops/ training programmes/ sensitization programmes conducted/organized by the institution with focus on capacity building in terms of research and imbibing research culture among the staff and students.

S. No.	Workshop/ training	Date	Participants	Sponsor	Department
	programs/Sensitization				
	programs etc.				
1	Natoinal Seminar on Solar	2011	All Faculty of ITS	ITSEC	AS& H & EEE
	Photovoltaic Cell		Engg, & neighbour invited Colleges		

2	Applications of signal processing in Electrical & Electronics Engineering	24 <sup>th</sup> & 25 <sup>th</sup> Feb' 2012	All Faculty Staff & students of ITS Engg, & neighbour invited Colleges	ITSEC	EEE & ECE
3	11 <sup>th</sup> National conference on Industrial Problems on Machine and Mechanism (IPRoMM-2014)	Feb 26-27 2014	Students and faculty	Uttar Pradesh Technical University Lucknow	ME
4	Engineering Teaching: Next few years	25/01/2014	Students and faculty	ITSEC	ME
5	Expert talk on Rapid Prototyping and Reverse Engineering By Prof. R. A. Khan, Faculty of Engg. & Tech, Jamia Milia Islamia, New Delhi-25	13/09/2013	Students and faculty	ITSEC	ME
6	Invited talk on Innovation through inter-disciplinary by Prof. M. Arif ,School of Built Environment, University of Salford , U. K.	29/08/2013	Students and faculty	ITSEC	ME
7	Guest lecture on I.C. Engines: Fuels and Combustion Prof. M. M. Hasan, Faculty of Engg. & Tech, Jamia Milia Islamia, New Delhi-25	19/03/2013	Students and faculty	ITSEC	ME
8	Guest lecture on General Trends in Mechanical Engineering by Dr. Puneet Tandon, IIITDM Jabalpur	23/08/2012	Students and faculty	ITSEC	ME
9	Invited talk on Laser Systems and applications by Prof. Ajoy Ghatak, IIT	27/02/2012	Students and faculty	ITSEC	ME

	Delhi				
10	Seminar on Advanced Industrial Engineering (AIE 2011)	14/05/2011	Students and faculty	ITSEC	ME
11	Organized two day National Conference on Microwave, Antenna and Signal Processing, Sponsored by DST New Delhi	22-23 <sup>rd</sup> April 2011	Faculty and students	AICTE	ECE
12	Organized two day Seminar on Applications of Signal Processing in Electrical and Electronics Engineering. (ASPEE-2012)	24 <sup>th</sup> and 25 <sup>th</sup> Feb 2012	Faculty and students	DST	ECE
13	A Robotics Workshop on "Unmanned Aerial Vehicle". Organized by YOGIKI a Chennai based organization.	29-30 <sup>th</sup> September 2011	Faculty and students	ITSEC	ECE
14	A training program organized by ROCKWELL AUTOMATION INDIA Pvt Ltd	March-April 2014	Faculty and students	ITSEC	ECE
16	Organized two day National Conference on Recent Advances in Electronics & Communication Engineering (RACE-2014).	28th 29th March 2014	Faculty and students	Rockwell Automation, S.Chand, CETPA	ECE

## 3.1.7 Provide details of prioritized research areas and the expertise available with the institution.

Name of Department	Specialization	Expertise		
ASH	Applied Mathematics	Dr. Rakesh Dube		
	Differentiable Manifold	Dr. O P Chaudhary		
	Material Science	Dr. P K Shukla		
	Spectroscopy	Dr. S K Mishra		
CSE	Software Testing	Dr. Shailesh Tiwari		
	Bio-informatics	Dr. Manoj Kumar Gupta		
	Mobile Adhoc Networks	Dr. Ashish Kumar		
ECE	Wireless Communication	Dr. Lokesh Bansal		
	Wireless & Mobile Communication	Dr. Leena Arya		
EEE	Power Sytems	Dr. Vinay Kakkar		
	Image processing and Soft Computing	Mrs. Gauri Katiyar		
	DC-DC converter for PV systems	Mr. L NavinKumar Rao		
	Soft computing( Fuzzy, Neuro Fuzzy, Genetic Algorithm	Mr Noorul Islam		
	Reliability Engineering	Ms Kalpana Hazarika		
	Energy Management	Mr. Mohit Saxena		
ME	Thermal Engineering	Mr. Sanjay Yadav		
	Advanced Manufacturing Process	Dr.Sanjay Mishra		
	Industrial Engineering, Automation	Dr. Bhupendra Prakash Sharma		
	Thermal Engineering	Mr. Arvind Kumar Tiwari		
	Production and Manufacturing	Mr. Kamal Asif Khan		

Engineering, Green Supply	
Chain Management,	
Ergonomics	
Industrial Engineering	Mr. Suresh Prasad

### 3.1.8 Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?

- The college organizes workshops, seminars and faculty development programs and invites researchers as guest to interact with the faculty and students.
- Faculty may invite eminent professors of reputed institutions to visit the college and interact with the students. The college provides financial support to them.
- Short term training programs by the industry on recent technologies are also organized for the students.

# 3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?

Our college does not have the provision of sabbatical leave. However, the academic leaves are granted to the faculty pursuing research in other institutions or to participate in conference/ FDP/ Seminar etc.

# 3.1.10 Provide details of the initiatives taken up by the institution in creating awareness/advocating/transfer of relative findings of research of the institution and elsewhere to students and community (lab to land)

- As per the curriculum students are required to deliver presentations on their projects.
- Students participate in various technical programs and contests where they display their projects/ research work. The college provides funds to support them.
- Guest lectures/ invited talks are organized where students learn about recent research issues and ideas.

#### 3.2 Resource Mobilization for Research

### 3.2.1 What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization.

The college has a provision of 10 lakhs for research. However, it is not a constraint and depending on the requirement the college may provide more assistance. The major heads of expenditure are participation in national/ international conference, seminar, attending faculty development programs/ workshops.

# 3.2.2 Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years?

Yes, the college provides seed money to the faculty for research. The amount and decision for disbursement varies from case to case basis. The details of disbursement are as follows.

S .No.	Department	Faculty	Amount	Year
1	Mechanical	Mr. Manvendra	5000	2013-14
	Engineering	Yadav		
		Mr. Manvendra	5000	2012-13
		Yadav		
2	Electrical and	Mr. Mohit Saxena	1500	2013-14
	Electronics	Mr. Nurool Islam	1500	2013-14
	Engineering	Ms. Nitit Varshney	1500	2013-14
		Mr. L N Rao	15000	2013-14
		Ms. Gauri Katiyar	5000	2013-14
		Dr. V K Chandana	20000	2012-13
		Mr. Mohit Saxena	5000	2012-13
3	Electronics and	Jugal Kishore Gupta	13200	2013-14
	Communcation			
	Engineering			

### 3.2.3 What are the financial provisions made available to support student research projects by students?

Students are encouraged to develop research projects. Limited financial support but infrastructure support is provided to the students.

# 3.2.4 How does the various departments/units/staff of the institute interact in undertaking inter-disciplinary research? Cite examples of successful endeavors and challenges faced in organizing interdisciplinary research.

The college has created a research cell comprising members from all the departments. The college organizes interdisciplinary Seminars, Workshops and Faculty Development Programmes on current research trend which require a coherent approach from several disciplines. Faculty members as well as students are encouraged to attend such programmes organized by other reputed institutes so that the knowledge can be shared on a broader platform.

### 3.2.5 How does the institution ensure optimal use of various equipment and research facilities of the institution by its staff and students?

The college maintains the usage registers to monitor the optimal use of equipment and research facilities (library, digital library, laboratory, software). The students of final year can used all the facilities for their project work. The conferences organized by various departments also help in identifying new areas for the utilization of existing equipment and research facilities.

### 3.2.6 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If 'yes' give details.

No, however the college has submitted research projects for grants under MODROB scheme of AICTE, FDP, FIST proposal to DST.

# 3.2.7 Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organizations. Provide details of ongoing and completed projects and grants received during the last four years.

The college provides all the required support like library, journals, laboratories, leave and financial support needed to secure the research project. The faculties have submitted the research projects to funding agencies and are in waiting state.

#### 3.3 Research Facilities

### 3.3.1 What are the research facilities available to the students and research scholars within the campus?

The college has functioning R&D cell and the senior faculty are members of the cell. They provide guidance to faculty of various departments in the design, implementation and testing of their research ideas.

The college has subscribed national/ international journals and has a well established digital library which is accessible to students even on holidays. The college is equipped with Wi-Fi facility in addition to wired model of communication, so that the students can continue to work beyond college working hours. Research scholars registered with other universities are provided with computers and advanced software to complete their research.

# 3.3.2 What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?

- The faculty is encouraged to attend/ participate in academic activities at various levels like national/ international conferences/ workshops/ FDPs across the country. The college provides financial support to them.
- The college invites eminent faculty from reputed institute to interact with the faculty and students to share their ideas in the emerging research areas.
- The college library is enriched with latest editions of books on regular basis. The college subscribed the IEEE digital library for the faculty and students.
- 3.3.3 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities? If 'yes', what are the instruments / facilities created during the last four years?

No

3.3.4 What are the research facilities made available to the students and research scholars outside the campus / other research laboratories?

None

3.3.5 Provide details on the library/ information resource centre or any other facilities available specifically for the researchers?

S. No	Item	Description
1.	E-Journals	EBSCO (No. 1000 upto 31 <sup>st</sup> May,2014), Springer Mechanical (49), Electrical/ Electronics and Communication/ Computer Science (149) subscription upto Dec, 2014
2.	Printed Journal (National/ International)	No. 73
3.	Digital Library	10 systems with multimedia support
4.	Softwares	NS2, MATLAB, AutoCAD, Stat ProE, Oracle
5.	Tools	News papers and Magazines

# 3.3.6 What are the collaborative researches facilities developed / created by the research institutes in the college? For ex. Laboratories, library, instruments, computers, new technology etc.

	Number of Publications							
	International Journals	National Journals	International Conference	National Conference	Books/ Monographs/ Chapter Published			
Faculty	28	4	13	14	4			
Students	NIL	NIL	NIL	NIL	NIL			

No

#### 3.4 Research Publications and Awards

### 3.4.1 Highlight the major research achievements of the staff and students in terms of

- patents obtained and filed (process and product)
- Original research contributing to product improvement
- Research studies or surveys benefiting the community or improving the services
- Research inputs contributing to new initiatives and social development

The details of major research achievements of the staff and students are as follows:-

Patents obtained and filed (process and product): Nil

Original research contributing to product improvement: Nil

Research studies or surveys benefiting the community or improving the services resulted in the following publications:

Research inputs contributing to new initiatives and social development are given to the young researchers like PG students and the faculty pursuing PhD's to motivate them to pursue research as a career. Since, it will help the country to build the critical resource pool for strengthening the science and technology and R&D base.

3.4.2 Does the Institute publish or partner in publication of research journal(s)? If 'yes', indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?

No, however the college has planned to publish an international journal "ITSEC International Journal of Engineering Sciences".

#### **Composition of Editorial Board:**

Chief Editor: Dr. Vineet Kansal, Director, ITSEC, Gr. Noida

#### **Co-Editors in Chief:**

Dr. Ashish Kumar, Professor, Deptt. of CS&E, ITSEC, Gr. Noida

Dr. Manoj Kumar Gupta, Associate Professor, Deptt. of CS&E, ITSEC, Gr. Noida

#### **Editorial Board:**

Dr. Shailesh Tiwari, Associate Professor, Deptt. of CSE ITSEC, Gr. Noida

Dr. Lokesh Bansal, Associate Professor, Deptt. of ECE, ITSEC, Gr. Noida

Dr. Sanjay Mishra, Associate Professor, Deptt. of ME, ITSEC, Gr. Noida

Dr. Leena Arya, Associate Professor, Deptt. of ECE, ITSEC, Gr. Noida

Mrs. Rakhi Sharma, Assistant Professor, Deptt. of ASH,ITSEC, Gr. Noida

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Prof. (Dr.) Lokesh Bansal, Associate Professor, ITS Engineering College, Gr. Noida

Prof. (Dr.) Vinay Kakkad, Associate Professor, ITS Engineering College, Gr. Noida

Prof (Dr.) Sanjay Mishra, Associate Professor, ITS Engineering College, Gr. Noida

#### **Publication Policies:**

### Aim and Scope of the journal:

The aim of the journal is to provide an international forum for the publication and dissemination of original work that contributes to the development of the field. The journal reports the novel ideas in the emerging fields of technology and sciences.

The Journal is a peer reviewed international journal publishing high-quality articles covering all aspects of technology and sciences. The journal considered only manuscripts that have not been

published, in any language, elsewhere. The journal is published by Institute of Technology and Science (ITS) Engineering College, Greater Noida.

The journal covers the areas of computer science, information technology, electrical and electronics engineering, electronics and communication engineering, and mechanical engineering. However, the journal's domain is not limited to the core engineering areas only; the original papers from other applied fields such as nanotechnology, bio-informatics, and material sciences are also welcome.

#### **Objectives**

The objective of the journal is to disseminate new knowledge on recent technological advancement among academic and research community, professionals and industry practitioners. The journal provides a platform for the researchers, industrialist and students to publish their research and developments in the areas of the journal. The journal provides a record of the advancements in engineering and technology to the researchers.

#### **Review Process**

The researchers are requested to submit articles at <a href="itsecijet@its.edu.in">itsecijet@its.edu.in</a>. The editorial board will acknowledge the receipt of the papers within a day. The paper submitted should be written in English language as per the IEEE format. The submitted manuscript must include title, abstract, keywords, author(s) and affiliation(s), email address. The author submitting the manuscript is the corresponding author. The accepted formats for manuscript are LaTeX and MS-Word.

Authors, who are advised to revise the manuscripts, are advised to highlight the changes and reviewers comments separately. In depth review of the paper is done by the reviewers of the domain. All papers are reviewed by two independent reviewers. Paper is accepted when the recommendations from both the reviewers are positive.

Each paper submitted will be reviewed by at least two independent reviewers. Preliminary review will be done by editorial board, only those papers that meet the scientific and editorial standards of the Journal will be sent for outside review. The editorial board will assign the paper to the reviewers for comprehensive time bound review. Reviewers are expected to complete the review within one month of the acceptance of the manuscript. Thereafter editorial board based on reviewer's comments may accept/ accept with changes/ reject the paper. If the paper is accepted with changes, changes required are sent to the corresponding author of the paper and asked to submit revised manuscript within one week (depending on the changes required).

Editorial board decision along with the comments is sent to corresponding author. Finally, accepted manuscripts (after major/minor revision) are forwarded for publication to the journal. A minimum of 25-30 days is required to complete the review process.

### 3.4.3 Give details of publications by the faculty and students:

- Publication per faculty
- Number of papers published by faculty and students in peer reviewed journals (national / international)
- Number of publications listed in International Database (for Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
- Monographs
- Chapter in Books
- Books Edited
- Books with ISBN/ISSN numbers with details of publishers
- Citation Index
- SNIP
- SJR
- Impact factor
- h-index

The detail list of publication for each faculty has been shown in the Annexure of Evaluative report of individual Departments. Other details of publication has been shown below.

Department	S. No.	Name of Faculty	National Journal	International Journal	Publications in International Database	Books Edited/ Monographs/ Chapter publication with ISBN, ISSN detail	Citation Index	SNIP	SJR	Impact Factor	h-index
	1	Dr. P.K. Shukla	4	8	-	-	192	12.876	8.433	20.42	
	2	Mr. Prashant kumar	Nil	4	-	-	4.77	2.177	3.999	4.66	
	3	Dr. Anupam Kumar SIngh	1	8	1	ISBN 978-3- 642-36039-8	11	-	1.866	0.451	
	4	Ms. Bhanumati Panda	1	NIL	-	-	-	-	-	-	
	5	Ms.Renu Chaudhary	Nil	2	-	ISSN 0974- 7273,0975-376	-	-	-	-	
	6	Dr. Anjali Gupta	Nil	8	-	ISBN 978-3- 659-54589-4	-	7.951	6.091	18.177	
AS& H	7	Dr. Rakesh Dube	5	4	-	ISBN 978-81- 8487-024-4; 978-81-8487- 054-1; 978-81-7319- 663-8; 81-89757-37-7	-	0.43	0.346	4.393	
<b>A</b>	8	Ms. Arti Dua	-	2	-	ISSN: 2249- 0558, 2229 - 7995	-	-	-	-	
	9	Ms. Kavita Sinha	Nil	1	1	ISSN 0974- 7273, 0975- 3761	-	-	-	-	
	10	Dr.S.K.Mishra	-	4	-	-	188	5.486	4.346	11.624	
	11	Dr.A.K.Yadav	3	4	-	-	36	3.839	2.629	5.994	
	12	Ms. A.K.Chaku	Nil	1	-	ISSN:2319- 6564					
	13	Dr.Rashmi Gupta	1	10	-	-	-	-	-	10.224	
	14	Dr.Divya Tripathy	Nil	10		ISBN 0978-3- 8465-4868-4	239	6.67	3.637	12.638	
	15	Dr. Deepa Singh	7	2	-	-	18	-	-	9.59	
	16	Dr. Ruchi Srivastava	2	4	-	-	23	5.18	3.466	8.591	

Department	Name	Publications	Peer reviewed journals	Listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN /ISSN	Citation Index	SNIP	SIR	Impact Factor	h-index
	Dr. Shailesh Tiwari	27	08	26	Nil	1	1	1	25	Nil	Nil	1.1	3
	Dr. Ashish Kumar	14	-	=	-	-	-	-	ı	-	-	-	-
	Dr. Gagan Deep Arora	10	-	-	ı	-	-	-	-	-	-	-	-
	Dr. Manoj Kumar Gupta	13	03	07	0	01	0	-	10	_	-	1.5	-
	Mr. Ankur Saxena	5	-	=	-	-	-	-	ı	-	-	-	-
	Mr. Tarun Kumar Chugh	2	-	-	ı	ı	ı	-	ı	-	ı	=	ı
	Mr. Devesh Garg	4	-	-	ı	-	ı	-	ı	-	-	-	-
	Mr. Abhishek Shivhare	2	1	-	-	-	-	-	1	-	ı	-	-
	Mr. Vijay Shukla	2	-	=	-	-	-	-	-	-	-	-	-
	Ms. Pritee Gupta	14	-	-	-	-	-	-	-	-	-	-	-
CSE	Mr. Sandeep Kumar	2	-	=	-	-	-	-	1	-	-	-	-
	Mr. K. P. Singh	7	-	-	-	-	-	-	-	-	-	-	-
	Ms. Deepti Mishra	3	-	=	-	-	-	-	-	-	-	-	-
	Mr. Abhishek Singh Verma	5	-	-	-	-	-	-	-	-	-	-	-
	Mr. Rakesh Kumar Rai	1	-	-	-	-	-	-	=	_	-	=	=
	Mr. Arun Kumar Rai	1	-	-	-	-	-	-	-	-	ı	-	=
	Mr. Yogesh Sharma	1	-	-	-	_	-	-	=	-	-	=	-
	Mr. Dushyant Singh	1	-	-	-	-	-	-	-	_	-	-	-
	Mr. Vivek Tomar	6	-	2	-	-	-	-	-	-	-	-	-
	Ms. Shweta Rathour	4	-	-	-	-	-	-	-	-	-	-	-
	Ms. Bhawna Gupta	2	-	-	-	-	-	-	=	-	-	=	-

2011-12				2012-13				2013-14								
Department	Name of Faculty	Paper Pub	Paper presented	Sem/Conf/ Workshop/ FDP	Award recognition	Others	Paper Pub	Paper presented	Sem/ Conf/ Workshop/ FDP	Award recognition	Others	Paper Pub	Paper presented	Sem/ Conf/ Workshop/ FDP	Award recognition	Session Chair
	Dr.Lokesh Kumar Bansal	1	1				2					1				
	Dr. Leena Arya		2					1		2			3			2
	Ashish Gupta						3					1				
	Jugal Kishore	1	3				2									
	Monika Bhatnagar						3		1							
ECE	Agha Asim Husain		2	3			3									
	Amendra Bhandari			1			3		2			1				
	Md Rashid Mahmood		1													
	Prabhakar Sharma		5				2									
	Garima Cahndel		5													
	Manju Singh		2													
	Manveen Chadha						5					1				

Department	Name Of the Faculty	International Journal	National Journal	International Conference	National Conference
	Dr. Vinay Kakkar	6	-	2	5
	Ms. Gauri Katiyar	0	0	3	1
$\subseteq$	Mr. L. Navin Rao	1	2	-	1
EEE	Mr. Noorul Islam	2	=	1	-
	Ms. Niharika Singh	2	-	1	1
	Mr. Piyush Choubey	1	=	-	-
	Jitendra Singh	1	-	-	1

Department	Name of Faculty	Number of papers published in peer reviewed in journals	Number of publication listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of	Citation Index	SNIP	SJR	Impact factor	h-index
	Mr. Sanjay Yadav	3	3	-	-	-	-	13	-	1.27	2.605	-
	Dr. Sanjay Mishra	8	6	-	-	-	-	5	-	0.476	0.925	-
	Dr. Bhupendra Prakash Sharma	11	11	-	-	-	-	58	-	-	1.779	2
ME	Mr. Suresh Prasad	2	2	-	-	-	-	-	-	-	-	-
Σ	Mr. Bhupesh Ojha											-
	Mr. Arvind Tiwari	2	2	-	-	-	-	1	-	0.28	0.188	-
	Mr. Md. Kamal Asif Khan	1	0	-	-	-	-	-	-	ı	-	-

		2011-12						2	2012-13				2013-14			
Department	Name of Faculty	Paper Pub	Paper presented	Sem/Conf/ Workshop/ FDP attended	Award recognition	Others	Paper Pub	Paper presented	Sem/ Conf/ Workshop/ FDP attended	Award recognition	Others	Paper Pub	Paper presented	Sem/ Conf/ Workshop/	Award recognition	Others
	Ankur Srivastava	2	-	-	-	-	1	_	2	-	-	4	1	2	-	1
	L. K Verma	1	-	-	-	-	-	-	2	-	-	-	-	1	-	1
MBA	Himani Goswami S.	-	-	1	-	-	1	-	2	-	-	2	2	2	-	1
	Neelam Sheoliha	-	-	1	-	-	-	-	2	-	-	1	3	2	-	1
	Anuja Shukla	-	-	2	-	-	1	1	4	1	-	1	2	1	1	1

### 3.4.4 Provide details (if any) of

- research awards received by the faculty
- recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally
- incentives given to faculty for receiving state, national and international recognitions for research contributions

S. No.	Name of Faculty	Research Award/	Details
		Recognition/Incentive	
1	Dr. Leena Arya	Research award	1. [Outstanding Ph.D. Thesis Award]
			International Conference on Soft
			Computing for problem Solving
			SocPros-2012, Dec 2012, Jaipur, India
			2012.
			2. [Best Paper Award] Recent Advances
			in Digital Information Communication
			Technology (RADICT- 2012), pp.367-

				<ul> <li>372, November 2012, Faridabad, India</li> <li>3. [Best Paper Award] National Conference on Contemporary and Futuristic Trends in Computer Science and Engineering, pp.1-8, November 2010, Palwal, India.</li> <li>4. [Best Paper Award] 3rd International Conference on Advance Computing &amp; Communication Technology, APIIT, pp.373-377, November 2008, Panipat, India.</li> </ul>
2	2.	Dr. Bhupendra Prakash Sharma	Research award	Received best paper award in the International Conference on Business Intelligence, Analytics, and Knowledge Management (BIAKM-2012) organized by IBS Hyderabad, IFHE University, Dontanapalli, Hyderabad, AP, India. April, 19-20, 2012.  Received best paper award in the International Conference on Information and Knowledge Management (ICIKM-2012) organized at Lanson Place, Kuala Lumpur, Malaysia during July 24 to 26,
				Received International Travel Grant from Department of Science and Technology (DST) to attend the IEEE - International Conference on Industrial Engineering and Engineering Management (IEEM-2012) organized at Hong Kong Convention and Exhibition Center, Hong Kong.

#### 3.5 Consultancy

### 3.5.1 Give details of the systems and strategies for establishing institute-industry interface?

In order to promote the institute-industry interface the college invites the industry people for expert lecture on advanced topics related to various departments. Our students are encouraged to participate in workshops/ conferences organized by industrial professional bodies. We have Corporate Resource Centre (CRC) department to interact with industries and other professional bodies.

CRC strengthen the college interaction in establishing networking with the industries, professional bodies, and alumni.

## 3.5.2 What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?

The college policy permits to provide consultancy to the outside industry and other agencies for sharing the expertise available in the college. As per the policy 60% of the total revenue generated through consultancy work is shred with consultancy team and 40% is kept with college for overhead and infrastructure expenses.

Latest report of the college containing achievements, new support/ services is created and research findings by the faculty are periodically sent to the industry for information and update.

The college and CRC department encourage the faculty to given consultancy to industries/corporate. The faculty involved in consultancy is given the duty leave as and when required.

The college website is regularly updated to advertise research expertise available in the various departments of the college and their advancements.

### 3.5.3 How does the institution encourages the staff to utilize their expertise and available facilities for consultancy services?

The college provides duty leave to the concerned faculty who are involved in consultancy work. The college has the provision to reduce the academic and administrative load so that the faculty can devote more time for consultancy. The faculty involved in consultancy is given special weightage during their appraisal. The college advises the faculty to take consultancy through personal contacts and by personally visiting the industries.

## 3.5.4 List the broad areas and major consultancy services provided by the institution and the revenue generated during the last four years.

The college has not generated any revenue through consultancy work in the last four year, however we are actively exploring the avenues for consultancy in the following areas.

- Image Processing and Soft computing
- Energy Management
- Software Testing
- Bioinformatics
- Computational Biology
- Green and Lean Manufacturing
- Advanced Manufacturing

## 3.5.5 What is the policy of the institution in sharing the income generated through consultancy (staff involved: Institution) and its use for institutional development?

The college has the policy of sharing the income generated through consultancy in the ratio of 50: 50 (consultancy person: college). The revenue earned by college is used for infrastructural support and overhead expenses of the college.

### 3.6 Extension Activities and Institutional Social Responsibility (ISR)

# 3.6.1 How does the institution promote institution-neighborhood-community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?

The college promotes institute-neighborhood-community network by engaging students under the guidance of faculty for their overall development in various activities organized by Corporate Social Responsibility (CSR) cell. The details of activities organized by CSR cell is given below. In addition to CSR cell activities the college provide following services:-

S. No.	Activity	Date	Activity Description
1	Safaii Aviyaan	14 <sup>th</sup> April 2014,	Fourteen students along with the coordinator of C.S.R. of our college volunteered for the clean drive (safai aviyaan), which started at 10 a.m. in different locations of Knowledge park III area. With short notice, some of our students gathered and involved in this drive with strong enthusiasms.
2	Literacy Drive	4 <sup>th</sup> May 2014,	CSR cell of I.T.S Engineering College, took an innovative step on 4 <sup>th</sup> may 2014, for enhancing the education awareness and literacy programme among the underprivileged people and their children . As we know, there are many construction workers and their children who are residing in different locations of Greater Noida.

3	Literacy Drive	11 <sup>th</sup> May 2014,	The CSR Cell of I.T.S Engineering
			College has been continuing the effort
			to make those children of the slum
			where we started the programme on
			4 <sup>th</sup> may 2014. On 11 <sup>th</sup> may again we
			visited the same place for the same
			purpose. And we would like to
			continue it for the long term so that
			we can realize our dream to make
			them literate and aware about the
			value of education. Following
			students were participated for the
			purpose.

- Scholarship is given to the meritorious students to motivate them to excel in their studies.
- Sports week is organized to develop team spirit and confidence, so that they become good citizen.
- Relief fund for flood/drought/ earth quake affected areas etc.

### 3.6.2 What is the Institutional mechanism to track student's involvement in various social movements / activities which promote citizenship roles?

In order to track the student's involvement in various social movements/activities which promotes citizenship roles the college encourages each department to establish stuent societies. Each society has its own student convener who works under the supervision of Dean Student Welfare. Faculty members from the concerned department also monitor and control the various activities/ events organized by such societies. The database of all the students involved in social activities is maintained by the Dean Student Welfare to track the student's participation. The college encourage the students to participate in social movement/ activities by giving them the certificates and due recognition in terms of their General Proficiency marks and attendance. The student's contribution is also shared with all the staff of the college to motivate them to become good citizen.

### 3.6.3 How does the institution solicit stakeholder perception on the overall performance and quality of the institution?

The feedback from the stakeholders such as the alumni, industry persons, parents of the students, eminent speakers, is taken and accordingly necessary actions are implemented. The overall performance and quality of the college is evident by the academic results and personality of the students.

# 3.6.4 How does the institution plan and organize its extension and outreach programmes? Providing the budgetary details for last four years, list the major extension and outreach programmes and their impact on the overall development of students.

The college has planned to regularly organize extension and outreach programmes. These programmes help the students not only to improve their academics but social, cultural and community services. The expense incurred in these activities is reimbursed by the college. Recently the CSR cell of the college has organized literary program for the underprivileged section of the society and also donated educational materials like books, note books, pencils etc.to them. Such programmes help the students to build their moral values and ethics while doing social and cultural activities.

# 3.6.5 How does the institution promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/International agencies?

These activities are being conducted by various cell of the college. At the time of induction programmes students are informed about the benefits of such kind of services and their impact in their life, on the society. The information about the activities is advertised through notices, emails, and continuous updates on websites. The college has submitted the proposal of NSS (National Service Scheme) to the University for approval which is under consideration.

3.6.6 Give details on social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from under-privileged and vulnerable sections of society?

S. No.	Activity Description	Date	Faculty Involved	Students Involved
1	Safaii Aviyaan	14 <sup>th</sup> April 2014, 10 A.M- 11.30. A.M.	Mr. Saroj Kumar Dhal	1.Sahil Ahuja(IT 2 <sup>nd</sup> Yr.) 2- Kanhaiya (IT 2 <sup>nd</sup> Yr.) 3- Yuvraj (IT-2 <sup>nd</sup> Yr.) 4- Nirja (IT 2 <sup>nd</sup> Yr.) 5-Kannupriya (IT-2 <sup>nd</sup> Yr.) 6- Apoorv Suri (IT 2 <sup>nd</sup> . Yr.) 7- Ashwary Naveen (CSE 2 <sup>nd</sup> Yr.) 8- Ujjal Ganesh (CSE 2 <sup>nd</sup> Yr.) 9- Ashirwad Rastogi (CSE 2 <sup>nd</sup> Yr.) 10- Aviral Mani (CSE-2 <sup>nd</sup> Yr.) 11- Lakshya Gupta (CSE-2 <sup>nd</sup> Yr.) 12-Vikas Vishwakarma (CSE-2 <sup>nd</sup> Yr.) 13- Sdhhant Jain (ECE-2 <sup>nd</sup> Yr.) 14- Pritish Kumar (ME-2 <sup>nd</sup> Yr.)
2	Literacy Drive	4 <sup>th</sup> May 2014, 10 A.M-12 P.M.	Mr. Saroj Kumar Dhal, Mrs. Seema Srivastava and Mrs. Mallika Gandhi	1-Sahil Ahuja(IT 2 <sup>nd</sup> Yr.) 2- Kanhaiya (IT 2 <sup>nd</sup> Yr.) 3- Apoorv Suri (IT-2 <sup>nd</sup> Yr. 4-Srivats Goswami (EEE 4 <sup>th</sup> Yr.) 5- Kannupriya (IT-2 <sup>nd</sup> Yr.) 6- Apoorv Suri (IT 2 <sup>nd</sup> . Yr.) 7- Ashwary Naveen (CSE 2 <sup>nd</sup> Yr.) 8- Abhishek Singh (CSE 2 <sup>nd</sup> Yr.) 9- Ashirwad Rastogi (CSE 2 <sup>nd</sup> Yr.) 10- Vishal Rajawat (ME-4 <sup>th</sup> Yr.) 11- Shubham Ved (CSE-2 <sup>nd</sup> Yr.) 12- Anant Mishra (CSE-2 <sup>nd</sup> Yr.) 13- Varun Sharma (ECE-2 <sup>nd</sup> Yr.) 14- Raghav Jha (ECE-2 <sup>nd</sup> Yr.) 15- Krati Bhardwaj (ME 4 <sup>th</sup> Yr.) 16- Akash Gupta (ME-2 <sup>nd</sup> Yr.) 17- Sandeep Gupta (EEE-2 <sup>nd</sup> Yr.)
3	Literacy Drive	11 <sup>th</sup> May 2014, 5 P.M- 6.30 P.M.	Mr. Saroj Kumar Dhal	1.Shadaan Hussain(CSE 4 <sup>th</sup> yr.) 2- Kanhaiya (IT 2 <sup>nd</sup> Yr.) 3- Apoorv Suri (IT-2 <sup>nd</sup> Yr.) 4- Ravi Garg (cse 4 <sup>th</sup> yr.) 5- Aviral mani (cse-2 <sup>nd</sup> yr.) 6- Ashwary Naveen (CSE 2 <sup>nd</sup> Yr.)

# 3.6.7 Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment on how they complement student's academic learning experience and specify the values and skills inculcated.

Extension activities organized by the college make the student's aware and inculcate in them the team spirit, national integration, health awareness, social values, human values and ethics, and environment protection.

3.6.8 How does the institution ensure the involvement of the community in its reach out activities and contribute to the community development? Detail on the initiatives of the institution that encourage community participation in its activities?

The college ensures the participation of the community in its reach out activities by advertising/informing them about the benefits of the activity. The college also invites and provides support to other NGO's for holding such kind of activities.

3.6.9 Give details on the constructive relationships forged (if any) with other institutions of the locality for working on various outreach and extension activities.

We have inspired nearby colleges to organize programmes under the purview of CSR cell on regular basis to improve/ support underprivileged section of the society.

3.6.10 Give details of awards received by the institution for extension activities and/contributions to the social/community development during the last four years.

The college has been awarded by Rotary Club for organizing blood donation camp. The CMAI has also honoured the college with UP Education Award to spread education among the society in nearby areas.

#### 3.7 Collaboration

3.7.1 How does the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives - collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.

The college collaborates and interacts with research laboratories, institution and industry for research activities as follows:

- 1. Faculty are encouraged to visit the laboratories and interact with the person working in their domain at various research places like IITs, NITs, Research labs and Industry.
- 2. Industry experts, eminent scientists and senior faculty are invited for guest lectures.
- 3. The college encouraged the faculty to attend/ participate in the workshops, conferences, refresher courses and seminar organized by research agencies.
- 4. Industrial visits for students are planned on regular basis.

The interaction with research laboratories, institute and industry helps the college to enter into MoU with certain organization to provide specific tranining to students which lead to identifying various research prospects.

3.7.2 Provide details on the MoU/collaborative arrangements (if any) with institutions of national importance/other universities/ industries/Corporate (Corporate entities) etc. and how they have contributed to the development of the institution.

The college has MoU/collaboration with the following institutions/universities/industries

- 1. University of Leicester, University Road, Leicester, LE1 7RH, United Kingdom
- 2. Rockwell Automation India Pvt. Ltd.
- 3. Begapt Tech Solutions Pvt. Ltd.
- 4. Lelogix Design Solutions Pvt. Ltd.
- 5. Indian Institute of Skill Development Pvt. Limited
- 3.7.3 Give details (if any) on the industry-institution-community interactions that have contributed to the establishment / creation/up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories / library/ new technology /placement services etc.

The college regularly invites personnel from industries for expert lecture, faculty workshops, conferences and seminar. In addition to this the college also interacts with the industry people during placement of the students. Some of the industry oriented value addition courses are being offered to the students where the students interact with industry expert of particular domain. These interactions help in upgradation of labs and boost the placement of the students in different industries.

3.7.4 High lighting the names of eminent scientists/participants who contributed to the events, provide details of national and international conferences organized by the college during the last four years.

Department	Date of	Type of	Topic	Resource	Desigation	Organization
	Event	Event		Person's		
	10.04.2012	<b>C</b> 4	T.C: G. :.	Name	G :	G G (
	19.04.2013	Guest	Information Security	Mr. Pavan	Senior	Supreme Court
	07.00.0010	Lecture	& Cyber Laws	Duggal	Advocate	of India
	07.08.2013	Guest	Data Structure &	Dr. Sartaj	Professor	University of
		Lecture	Computer	Sahni		Florida, USE
	00 00 2012	<b>C</b> 4	Algorithms	D CC :	G:4	ŕ
	08.08.2013	Guest	A Secure data	Prof. Sanjay	Site	Missouri
		Lecture	sharing & query	Madria	Director &	University of
			processing framework via		Professor	Science &
			federation of Cloud			Technology,
			Computing			Missouri, USA
	13.08.2013	Guest	Entrepreneurship &	Dr. Amit	Co-	
	13.00.2013	Lecture	Startup for IT	Mittal &	Founders	
三		Lecture	Graduates	Mr. Vipul	Tounders	Gabbit Systems
CSE				Jain		
	26.08.2013	Guest	Mathematics: A	Ambassador	Diplomat	Indian Council
		Lecture	Critical Thinking	Krishna	Mentor	Of World
				Shetty		Affairs, New
						Delhi
	17.12.2013	Guest	Faculty Workshop	David	Professor	Computer
		Lecture	on Machine Learning	Barber		Science Deptt.,
			& Bayesian			University
			Reasoning			College,
						London
	20.12.2013	Guest	How to do good	Alexander	Professor	National
		Lecture	research in Computer	Gelbukh		Polytechnic
			Science			Institute,
						Mexico

Department	Name of the Person	Name of coordinator	Affiliation	Торіс	Date and Duration
	Prof. S.C. Dutta Roy	Dr. A.k. Singh	IIT Delhi	Signal Processing	24 <sup>th</sup> February, 2012/9.30 - 10.30 A.M
	Prof. S.N. Sharan	Dr. A.K.singh	GNIT Greater Noida	Adaptive signal processing	24 <sup>th</sup> February, 2012/10.45 to 11.30 A.M
	Prof. D.P. Kothari	Dr. V.K. Chadana	IIT Delhi	Energy Environment Problems facing the Third World and their probable solutions	24 <sup>th</sup> February, 2012/11.30 - 12.15 P.M.
ECE	Prof. Mini S. Thomas	Dr. V.K. Chadana	JMI New.Delhi	Scada Network in Power System	24 <sup>th</sup> February, 2012/12.45 – 1.30 P.M
	Prof. D. R. Bhaskar	Dr. A.k. Singh	JMI New.Delhi	Analog Signal Processing: Gm-C approach	24 <sup>th</sup> February, 2012/1.30 - 2.15 P.M.
	Prof. P. Kumar	Dr. V.K. Chadana	DTU New Delhi	Broadband Communication	25 <sup>th</sup> February, 2012/9.30 - 10.15 A.M.
	Prof. Shirshur Verma	Dr. V.K. Chadana	IIIT Allahabad	Signal processing for smart sensor and system	25 <sup>th</sup> February, 2012/10.15 - 11.00 A.M.
	Prof. Majid Jamil	Mr. R.K Yadav	JMI New Delhi	Renewable Energy Sources and Distributed	25 <sup>th</sup> February, 2012/11.30 -

			Generation	12.15 P.M.
Prof. R C Jain	Mr. R.K Yadav	JP University Noida	Image and Multi Dimensional Signal Processing	25 <sup>th</sup> February, 2012/2.30 - 3.15 P.M
Prof. Raj Senani	Mr. Ashish Gupta	NSIT, New Delhi	Analog Integrated Circuit: Trans linear circuits	25 <sup>th</sup> February, 2012/3.45 - 4.30 P.M
Prof. R.K. Khandal	Dr.Lokesh Kumar Bansal	Vice Chancellor UPTU, Lucknow	Emerging Trends in Engineering	28 <sup>th</sup> March, 2014
Prof. V.K.Jain	Dr.Lokesh Kumar Bansal	IIT Delhi	Advancement in Communication in Engineering	28 <sup>th</sup> March,_2014
Prof.D.K.Lobiyal	Dr.Lokesh Kumar Bansal	JNU Delhi	Sensor Network	28 <sup>th</sup> March, 2014
Dr.Kushal.K.Shah	Dr.Lokesh Kumar Bansal	IIT Delhi	Biomedical Engineering	28 <sup>th</sup> March, 2014
Dr. Piyush Maheswari	Dr. Leena Arya	Ericsson India Limitted	Cloud Computing	29 <sup>th</sup> March, 2014

Department	Name	Name of co-ordinator	Topic
	Prof. Saifur Rahman Mr. Ravindra Joshi	Dr. V.K. Chandna (HOD EEE)  Dr. V.K. Chandna, supported by Ms. Neeti Varshney and Mr. Deepak Singh	Smart Grids-Utilities and Challenges Smart Electric meter
EEE	Dr. Tariqul Islam	Ms.Monika Bhatnagar , Mr. Piyush Chaubey	Virtual instrumentation sensor and control
	Prof. Bhim Singh	Mr. Piyush Chaubey, Ms Ankita Agarwal	Application of brushless DC motor in domestic appliances

Department	Session	Title of the special lecture /workshop / seminar organized	Details of the external expert
		11 <sup>th</sup> National conference on Industrial Problems on Machine and Mechanism (IPRoMM- 2014)	Prof. S.K.Saha , IIT Delhi Mr. Dinesh Tyagi, Director, International Centre for Automotive Technology, Gurgaon
	2013-14	Expert talk on Rapid Prototyping and Reverse Engineering	Prof. R. A. Khan, Faculty of Engg. & Tech, Jamia Milia Islamia, New Delhi-25
		Invited talk on Innovation through inter-disciplinary research	Prof. M. Arif ,School of Built Environment, University of Salford , U. K.
ME		Guest lecture on General Trends in Mechanical Engineering Invited talk Regarding Company Achievements & Placement	Dr. Puneet Tandon, IIITDM Jabalpur Mr. Prashant Verma, Denso India Ltd.
		Guest lecture on I.C. Engines: Fuels and Combustion	Prof. M. M. Hasan, Faculty of Engg. & Tech, Jamia Milia Islamia, New Delhi- 25
		Expert lecture on Modern Manufacturing Methods in Electronics Industry	Dr. Giriraj Niyati, Moserbaer India Ltd.
	2011-12	Expert lecture on Green Manufacturing	Prof. Abid Haleem, Faculty of Engg. & Tech, Jamia Milia Islamia, New Delhi-25
		Expert talk on Ergonomics in work place design	Prof. Zahid Akhtar Khan,

	Faculty of Engg. & Tech, Jamia Milia Islamia, New Delhi- 25
Invited guest lecture on Just in Time Manufacturing	Prof. S. K. Garg, Delhi Technical University, New Delhi
Guest lecture on Genetic Algorithm	Prof. S. P. Singh, IIT Delhi
Expert lecture on Rapid Prototyping and 3D Printing	Mr. Naveen Gupta, Geo Informatics Consultant Pvt. Ltd.
Invited talk on Laser Systems and applications	Prof. Ajoy Ghatak, IIT Delhi

#### **MBA Department**

- 1. Mr Anupam Mishra- GM Marketing, State Trading Corporation India Ltd.
- 2. Mr. Nishant Maheshwari-Director, Neotric Business Solution.
- 3. Mr. Anil Girotra, Ex ED, Andhra Bank.
- 4. Mr. Sameer Kapoor, Founder Simply Paisa.com, SVP Rligare.
- 5. Mr. Pramod Kumar, Director Make India Smart Pvt. Ltd. and Ex GM PNB.
- 6. Mr. Sumit Shivlisa, Senior Associate, F& A, I Gate Solutions Ltd.
- 7. Mr. Sushant Agarwal, Manager Finance & Accounts, C & S Electric Ltd.
- 8. Mr. Sunil Gupta, FCA, Partner Nitin Mittal and Company.
- 9. Mr Marc Ragsdale, President, Prospus Consulting Pvt Ltd.
- 10. Mr Sunil Kesharwani, Renowned World Famous Motivator of Corporate World.
- 11. Mr S.K.Mukherjee, Group Director, JK Organisation.
- 12. Mr. Rohit Singh, Chairman and MD, Indian Development Finance Corp Ltd.
- 13. Mr. Mr Pankaj Agarwal, MD, Headstrom.
- 14. Mr Sachin Dhamija, GM Project, DTDC Logistics Ltd.
- 15. Mr Vijay Raghunathan (Chief Guest), President, American Express.
- 16. Mr Kapil Kaul, Advisor, Election Commission of India.
- 17. Dr Anoop Pant, Director, Accurate Inst of Mgmt.
- 18. Dr SP Singh, Director, INJ Business School.
- 19. Varun Mehrotra, Director, Institute of Financial Studies.
- 20. Mr. Anjan K Putatunda, RSM South and North Kawneer India (Division of Alcoa Indian Pvt Ltd.).
- 21. Mr Shushant Agarwal, DGM-Finance, C&S Electric Ltd.
- 22. Mr Rakesh Sharma, Head-HR & Adm, Motherson Sumi Infotech& designs Ltd.

# 3.7.5 How many of the linkages/collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/or facilitated.

The MoU have signed with individual departments to promote research and related activities. Two MoU have been signed by Mechanical Engineering Department and Computer Science and Engineering Department. One MoU have been jointly signed by Electronic and Communication Engineering along with Electrical and Electronics Department.

a) Curriculum development/enrichment: -NA-

b) Internship/On-the-job training: Yes

c) Summer placement :Yes

d) Faculty exchange and professional development : Nil

e) Research: Yes

f) Consultancy: Yes

g) Extension: No

h) Publication: Yes

i) Student Placement :Yes

j) Twinning programmes:NA

k) Introduction of new courses: Training programmes are organized for the benefit of students

1) Student exchange: No

m) Any other: Nil

### 3.7.6 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/collaborations.

In the last one year lot of efforts have been made at college level as well as at departmental level to initiate collaboration with industries and research organization. The Corporate Resource Centre of the college play a vital role in initiating and establishing the linkage with Industry, Public and private sector organizations for providing the avenues for research projects, guest lecturers, summer training and internships etc. Each department has signed MoU with external bodies related to their branch for acquiring specialized job / research oriented knowledge. The college has collaboration with Indian Institute of Skill Development Private Limited Gurgaon, Le-Logix Design Solution Private Limited Greater Noida, Rockwell Automation etc.

#### 4. Criterion IV - Infrastructure and Learning Resources:

#### 4.1 Physical Facilities

### 4.1.1 What is the policy of the Institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?

As per AICTE norms the college has the required infrastructure that ensures optimal teaching learning. If there is need for creation or enhancement of the existing infrastructure due to introduction of some new courses or due to changes in the curriculum or if the university demands the college effectively fulfills these requirements. The budget for the new requirement is planned keeping in view the required area and the financial needs for the new construction. It is prepared in consultation with the college director, concerned HoD, and faculty members. This budget is submitted to the management for approval. Once the budget is approved, it is put for implementation in identified area without any delay.

#### 4.1.2 Detail the facilities available for

a) Curricular and co-curricular activities – classrooms, technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, Animal house, specialized facilities and equipment for teaching, learning and research etc.

The college is very well aware about the importance of co-curricular and extra-curricular activities along with regular curriculum. Co-curricular activities include various workshops, seminars, conferences and guest lectures. Extra-curricular activities include the cultural fest, technical fest, annual fest and various sports events organized time to time in the college premises. Therefore, the college has made elaborate arrangements to cater to this essential need of student life:

- i) Class rooms: The College has 41 spacious class rooms and all the class rooms have proper sitting, lighting and ventilation facility.
- **Technology Enabled learning facility**. The College has **25** class rooms with a provision for attaching LCD projectors.
- **Seminar Hall**: The College has **8** air conditioned seminar hallswith Projector and sound system facilities.

- **iv) Tutorial room: 16 t**utorial rooms are there in college campus for conducting tutorial classes as per university norms. These rooms are also used for running special classes for weak and needy students.
- v) Laboratories/Workshops: The College has 75 state of the art laboratories and workshops and they are very well equipped to meet the demands of modern technology and science.
- vi) Specialized facilities and equipments available for teaching, learning and research:

  The College has four **E-Beam** interactive board facilities to make teaching more interactive and effective.

# b) Extra-curricular activities – sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, Public speaking, communication skills development, yoga, health and hygiene etc.

The College encourages and provides facilities for students to participate in sports, cultural and literary activities. The college has dedicated sports, cultural and literary committees supported by a team of faculty members and PTI, to look after all cultural, sports and extracurricular activities of the college. These extra-curricular activities are monitored by Director. Details of these activities are given as under:

S.No.	Details	Available Facilities	Area
1	Outdoor Games	1. Football	90 * 60 mtrs
		2. Basketball	28 * 15 mtrs
		3. Volleyball	18 * 9 mtrs
		4. Cricket ground with day	90 * 60 mtrs
		& night sports facility	
		5. Badminton	
		6. Lawn Tennis	44 * 20 feets
			78 * 27 feets
2	Indoor Games	Table Tennis	1
3	Auditorium	Seating Capacity: 700	1
		Sound System, fully air	
		conditioned, projector,	
		green room, drinking water	
		facility.	
4	Amphitheater	Seating Capacity: 1500	1

5	Gymnasium	2 Treadmill	1
		2 Cross Trainer	
		4 Cycles	
		2 Multi-gym	
		5 Joggers	

**Cultural Activities:** The College organizes its annual fest UDGHOSH previously known as SHAYONEE, every year to celebrate the spirit of college life. UDGHOSH a grand carnival of student's riveting enthusiasm and compelling intellectual, creative and athletic capabilities to display college's over all excellence in inspiring and nurturing students in every aspect rather than just being confined to academics.

The College has welcomed many national level artists such as Padma ShriTeejan Bai and Pt. Vishwa Mohan Bhatt.

The college has its own drama group EHASAS and this group has won many awards at regional and national level. The group has won first prize at National Level Techno-Cultural Fest Renaissance-14 (Annual Fest of Jaipur Engineering College & Research Centre, Jaipur) and won second prize at 'UDBHAV-14', (Annual Fest of Indraprastha Engineering College, Ghaziabad).

**Public speaking:** College gives special attention to public speaking skills as they imbibe confidence amongst students. Students are trained to overcome their fear related to public speaking. They are expected to participate in extempore, debate, competitions etc. They are provided formal platform for the same by conducting Intra-class, Inter-branch competitions, especially in cultural fest. Thus the students learn how to fight their fear, become more confident and expressive. They are able to showcase their ideas and opinions.

Communication skills development: English Proficiency classes are meant to help the students to harness their communication skills and boost their confidence. The focus of this course is to prepare our students to face the interviews confidently and stand a best chance to get placed. Their course is designed into ten modules which targets various aspects of English grammar and language. The course module includes various practical oriented exercises which provide students to use the language in real life situations and remove their inhibitions. College has a digital language lab with 30 modern software (sky pronunciation, tense buster, error terror, business writing and study skill success) installed computers systems, LCD Projector, sound systems and head phones.

Social Activities: The College has a CSR (Corporate Social Responsibility Cell, UTTHAN) which enthusiastically takes up various social causes and lends its helping hands to the poor and downtrodden sections of the society. The CSR Cell on the auspicious occasion of great social leader Dr. B.R. Ambedakar's birth anniversary on 14th April 2014 took the first step by looking the importance of cleanness of our surroundings. Students & faculty of the college volunteered and came for the clean drive (Safai Abhiyaan). CSR Cell started the education awareness and literacy programme among the underprivileged people and their children. The aim of the program was to make them literate so that their exploitation level can be minimized.

**Health and hygiene**: Free Dental Checkup is available at I.T.S Dental College & Research center for all faculty, staff and students. Surya Hospital adjacent to college provides all types of medical facility to entire I.T.S family.

Blood donation camps are organized regularly (11.11.2008, 28.10,2009, 18.11.2010, 13.10.2011) for helping the persons in need.

**Awareness about Cancer:** The College organized awareness about Cancer program on 2<sup>nd</sup> April, 2013 for female students and faculty members.

4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution/ campus and indicate the existing physical infrastructure and the future planned expansions if any).

College has a very exhaustive set up which is in accordance to the norms of AICTE. The college has been utilizing its existing infrastructure optimally to make learning experience utmost comfortable. All the class rooms have proper sitting arrangements along with good lighting and ventilation facility. The college has also special tutorial rooms for effective teaching learning. All the labs again serve and meet the requirements of pragmatic learning. In our college there are about 1757 students both in UG and PG courses. The college working hours is 9.00 am to 4.50 pm. The laboratories, R&D facilities are kept open till 6 pm for the best use of the infrastructure facilities. The central library is functioning all days from 9 am to 10 pm for the optimum utilization of books, journals, magazines and e-library.

In order to fulfil the future needs and requirements, additional infrastructure is being added from

time to time. In the last four years, buildings have been constructed/ renovated. The details of the construction that have taken place in the last four years are as follows:

Particulars	2010-11	2011-12	2012-13	2013-14 (Pro.)	
LAND	-	-	-	11,76,600	
BUILDING					
Building Construction - IV (Under Const.)	21,328,670	96,18,855	97,66,181	67,48,093	
Building Staff Flats - Extn. (Under	25,00,000	68,13,092	8,56,654	5,50,664	
Const.)					
Building Hostel – II	4,43,239	41,59,560	-	1,11,272	
Building Construction	-	35,07,655	-		
External Campus Development	12,14,682	3,81,025	2,57,143	1,53,307	
Open Air Auditorium	66,180	16,14,070	-		
VEHICLE					
Bus	16,68,050	-	-		
Car	-	35,89,103	-		
LIBRARY BOOKS	2,59,442	76,541	1,29,332	6,46,621	
COMPUTER	3,486,644	1,93,275	3,938	20,73,070	
COMPUTER SOFTWARE	10,92,282	-	-	15,94,413	
FURNITURE & FIXTURE	38,74,552	30,97,353	59,07,322	55,42,289	
LABORATORY EQUIPMENT / INSTRUMENTS	3,03,994	-	3,09,678	4,10,990	
ELECTRICAL INSTALL & GOODS					
Electric Instt. & Goods	8,55,617	7,00,669	7,18,626	7,08,702	
GENERATOR & MACHINERY					
D.G. Set	17,35,000	-	-	27,60,000	

OTHER EQUIPMENT				
Diesel Storage Tank	1,22,860	-	-	-
Water Pump	21,126	-	80,713	-
General Equipment	17,846	7,704	37,160	54,249
Solar Water Heating System	5,99,025	-	-	-
Fire Fighting Equipment	-	-	-	88,650
Kitchen Equipment	-	-	-	5,70,000
Solar Water Plant	-	-	-	40,00,000
Water Tank	-	-	-	1,28,250
Gym Equipment	-	-	-	3,53,978
OFFICE EQUIPMENT	7,04,282	3,63,319	3,92,137	28,18,475
TEACHING AID & EQUIPMENT	4,05,411	2,96,319	-	-
LIFT	-	-	-	17,15,629
	1,200,000	-	-	-
TOTAL				
	41,898,902	34,418,540	18,458,884	32,205,252

**#Master plan enclosed in Annexure 1** 

### 4.1.4 How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?

The college is fully equipped to welcome students with physical disabilities. There are lift and ramps to help such students in the college campus. During examinations the college provides special sitting arrangements for such students. They are helped by providing the seats on the ground floor. They are allowed to get their transport in the campus. College has inculcated a strong sense of responsibility both in faculty and staff to support & create a disabled-friendly environment.

### 4.1.5 Give details on the residential facility and various provisions available within them:

S.No.	Facilities	Details
1	Hostel Facility	2 Boys Hostels(Capacity: 800)
		1 Girls Hostel (Capacity: 250)
2	Recreational Facility	Each hostel has a common hall with a TV & DTH
		connection. Separate common room for boys and girls
		with carrom, chess and table tennis boards.
3	Security	Security personnel have been deputed at all main entry
		points. Entire campus is under CCTV surveillance and
		hostel caretakers have been appointed for proper upkeep
		and discipline.
4	Gymnasium	College has one gym for boys with trainer.
5	Medical Facility	Surya Hospital is in the college campus to meet any
		emergency.
6	Library Facility	College library is open for hostel students till 8:00 pm.
7	Internet & Wi-Fi	Yes, entire college campus & all hostels are wi-fi
	Facility	enabled.
8	Residential Facility for	20 one room set, 14 two room set & one principle quarter
	staff	with all modern amenities are available for faculty and
		staff members.
9	Additional support	24 hour water supply, RO Systems, 24 hours power back-
		up, lifts etc.

### 4.1.6 What are the provisions made available to students and staff in terms of health care on the campus and off the campus?

The college has very well equipped multi specialty Surya Hospital with 100 beds within the campus which can be approached in case of any medical emergency. The college has readily available first aid boxes for all its students, faculty and staff members. First aid boxes for students are available in each hostel and reception. The college has reputed hospitals in the vicinity and ambulance facility is provided for any medical emergency.

4.1.7 Give details of the Common Facilities available on the campus –spaces for special units like IQAC, Grievance Redressal unit, Womens Cell, Counseling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.

The college provides various common facilities on the campus for special units such as:

**IQAC:** This cell is responsible for the monitoring and controlling the quality of education imparted by the college. The IQAC cell regularly meet in the chamber of co-ordinator located in the ground floor.

**Grievance Redressal unit:** The College has Grievance Redressal unit to solve the problems related to students.

**Women's Cell:** This cell has responsibility of enlightening the women students and employees about their legal right and to endeavor towards the empowerment of the women through the promotion of gender equality and programmes concerning women welfare.

Counseling and Career Guidance Cell and Placement Unit: The College has a corporate resource center (CRC) to interact with the industry. The Cell is located in the administrative block and runs on the vision of transforming Student into Successful Professional has an immaculate track record of placing students over the years and has developed sound relationship with all major IT and core industries both at the local level and the national level. The Cell keeps the entire students profile database, CVs and conducts personality development programmes, workshops and seminars on employability, Interview Techniques, Group Discussion, Telephonic Etiquette, Personality Development and Soft Skills, Job opportunities abroad and on Higher Education.

**Health Centre:** The College has very well equipped Surya Hospital within the campus which can be approached in case of any medical emergency. The college has readily available first aid boxes for all its students, faculty and staff members. The college is situated on very prominent location which has some very reputed hospitals in vicinity.

**Canteen:** The College has a hygienically maintained canteen with a wide variety of eating options. The canteen block can house 150 students and is well staffed and equipped with all amenities.

**Drinking Water:** The College ensures providing safe drinking water to all the students and staff members. The facility of water cooler and water purifier are in place.

**Auditorium:** Auditorium is fully AC with latest audio visual arrangements and with a seating capacity of 1000.

**Recreational space:** Separate boys and girls common room with Carom, chess and Table Tennis boards. Each hostel has a common hall with a TV & Cable connection, large sports ground is available for outdoor games.

#### 4.2 Library as a Learning Resource

4.2.1 Does the library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library, student/user friendly?

Yes, the college has an advisory committee for the library. Dr. Vinay Kakkar is the chairman and Mr. Manish Kushwaha is the secretary of this committee. The library committee members are as follows:-

- 1. HoD Mechanical Engineering
- 2. HoD Electronics & Communication Engineering
- 3. HoD Computer Science Engineering
- 4. HoD Applied Science & Humanities
- 5. HoD MBA

Responsibilities of the library committee are:

- Recommendation of books & journals
- Availability of e-books journals, its publicity & usage
- Ascertaining whether the catalogue is up to date or not
- Budget planning for the year
- Budget utilization of the previous year
- Distribution of funds allocated for books, journals, periodicals etc.
- Purchase mechanism for the central library
- Infrastructure like tables, chairs, shelves, book racks etc. and their maintenance-fund
- Functioning of the digital library
- Student and faculty utilization of the library
- Awareness activities of the library
- Areas that need to be improved in the library

#### 4.2.2 Provide details of the following:

#### 4.2.2 Provide details of the following:

- Total area of the library (in Sq. Mts.): 935 sqmtr
- > Total seating capacity: 250
- ➤ Working Hours

On working days: 09.00 A.M. - 06.00 P.M

On holidays:

Before Exam Days: 09:00 AM - 10:00 PM

During Exam Time: 09:00 AM - 10:00 PM

During Vacations: 09.00 A.M. - 06.00 P.M.

> Layout of the library

Individual reading carrels: 4 Room

Lounge area for browsing and relaxed reading: 4 Room and 1 Hall

IT zone for accessing e-resources: Yes

# 4.2.3 How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during the last four years.

As per requirement of departments and faculty, a list of text books and journals is prepared and send to the library committee for consent. The library committee takes approval of the college director to purchase the required books and journals.

Details of titles and amount spent are given below:

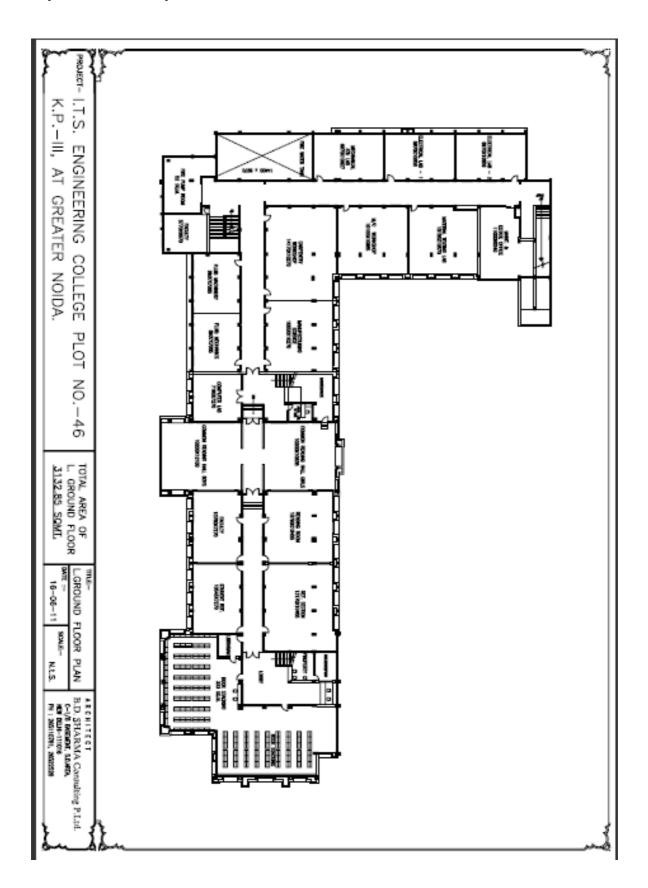
Library	2010	)-11	2011	1-12	2012-13		2013-14	
holdings	Number	Total Cost (Rs.)	Number	Total Cost (Rs.)	Number	Total Cost (Rs.)	Number	Total Cost (Rs.)
Books	4904	1182724	3903	537342	4197	1097588	3504	880915
Journals	118	103363	55	44609	123	162113	73	64134
E- Resources	241	386750	2000	1337110	1145	882756	1000	574875
Magazine	15	30648	15	30540	6	8000	6	8070
News Papers	11	15240	15	22104	14	23952	14	24108

#### Library accession system of college:-

- 1. The librarian send a mail to all faculty members regarding the list of books required for book bank, text books and references for the coming semester
- **2.** List of books along with the author, publication name, publication house after being finalized by the consent of the HOD is send to the librarian.
- **3.** Librarian gets the list approved by the director.

- **4.** Librarian then calls for quotations from the distributors.
- **5.** The distributor is then selected based on track record and discount provided.
- **6.** The books are then received within a week of issuing of work order
- **7.** Once the book is being received in the library, an accession No. is being attached to it and thereby book is entered in the accession register
- **8.** Stamping, due date slip and pockets are attached in the book.
- **9.** The book is then entered in the library software of the college
- **10.** A barcode is then generated and is then pasted on the book.
- **11.** Book is now ready to go on shelf.

#### Layout of the library:



### 4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection?

- OPAC : Alice for windows
- Electronic Resource Management package for e-journals : Springer-CSE,EEE,ECE,ME(198)
- Federated searching tools to search articles in multiple databases: Yes
- Library Website : No
- In-house/remote access to e-publications : No
- Library automation : Yes
- Total number of computers for public access: 10
- Total numbers of printers for public access :01
- Internet band width/ speed: 15 mbps
- Institutional Repository: Yes, The College has library storehouse for keeping books.
- Content management system for e-learning: Yes, using digital library
- Participation in Resource sharing networks/consortia (like Inflibnet): No

#### 4.2.5 Provide details on the following items:

- Average number of walk-ins : 90 per day
- Average number of books issued/returned : 50/40 per day
- Ratio of library books to students enrolled: 12:1
- Average number of books added during last three years : 5,600 per year
- Average number of login to opac (OPAC) : 30 per day
- Average number of login to e-resources: 50 per day
- Average number of e-resources downloaded/printed : 50 per day
- Number of information literacy trainings organized : Nil
- Details of "weeding out" of books and other materials : Nil

#### 4.2.6 Give details of the specialized services provided by the library

Manuscripts: Nil

Reference: Yes

• Ready reference services are offered to the students and faculties for the retrieval of Information, articles and books. (Average 5 - 10 queries per day)

- Long range reference service is provided to the scholars like information, bibliographical details and articles for their research. (Average 2 4 queries per day)
- Online reference service through e-mail and Intranet

#### Reprography

Reprography services are provided to the students and faculties however it is not encouraged as an ethical practice

#### ILL (Inter Library Loan Service): No

#### **Information Deployment and Notification**

The following Current Awareness service are displayed in the notice board

- Newspaper clippings
- National and International level important news
- Current Affairs and General News

#### **Downloads**

Downloading the e-resource through online databases is provided to the users.

#### **Printouts**

Printing, photocopying and scanning facilities are provided to the students and faculty members.

**Reading list / Bibliography compilation** – No

**In-house/remote accesses to e-resources** – No

**User orientation and awareness:** Yes, the rules and regulations are properly informed to everyone availing library facility.

### 4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the college.

The Library staff is responsible for overall maintenance of the library. It ensures that the reading experience of each of the student and faculty member is of enjoyment not of waste of time.

Following support is provided to the students and faculty by the library staff:

- Provides book bank to the student
- Helps in looking for specific books
- Helps in procuring the previous year question paper
- Reference section provide the books for preparing notes while sitting in the library

### 4.2.8 What are the special facilities offered by the library to the visually/physically challenged persons? Give details.

Ramps/Lift connects the all floors of the college to make it easy for to approach the library. Library staff takes special care of these students in terms providing them book and making special arrangements for their comfortable sitting in library and every department has a departmental library which makes easier for students to fulfill their needs.

# 4.2.9 Does the library get the feedback from its users? If yes, how is it analyzed and used for improving the library services. (What strategies are deployed by the Library to collect feedback from users? How is the feedback analyzed and used for further improvement of the library services?)

Yes, the library takes feedback from its users to improve on its facilities. Such as the library committee takes feedback from the faculty and students regarding the requirement of the books. As per the requirement of students and faculty, a list of required books is prepared and the library books are updated accordingly. Time to time the library committee takes feedback from students to improve other facilities such as providing extra sitting hours in library during examinations or proving required book or question papers or any other facility as demanded by students.

#### **4.3** IT Infrastructure

### 4.3.1. Give details on the computing facility available (hardware and software) at the institution.

S.No.	Available Facility	Details		
1	Total no. of computer labs	13		
2	Number of computers with configuration	Total Number of Computers in		
	(provide actual number with exact	Computer Labs: 765		
	configuration of each available system)			
		60 (Hp Pro 3090: Intel Dual Core 3.0 Ghz Processor,G43 Chipset,1 Gb Ram, 250 Gb Hdd, 18.5" Tft, Optical Mouse, Keyboard)		
		30 (Hp Pro 3090: Core 2.7 Ghz, G43 Chepset, 1 Gb Ddr Ram, 80 Gb Hdd, 18.5" Lcd, Keyboard Mouse)		
		60 (Hcl Core 2 Duo 2.93ghz, 945 Intel Chepset Mb, 160 Gb Hdd, 1 Gb Ram, 18.5" Tft, Keyboard, Mouse)		
		120 (Lenovo Duel Core 1.6 Ghz, 945 Intel Chepset Mb, 160 Gb Hdd, 1 Gb Ram, 17" Crt Monitor, Keyboard, Mouse)		
		<b>78</b> (Lenovo Duel Core 1.6 Ghz, 945 Intel Chepset Mb, 250 Gb Hdd, 2 Gb Ram, 19" Tft Monitor, Keyboard, Mouse)		
		30 (Hp D290: Intel Mb 915, Piv 2.8, 256 Mb Ram, 80 Gb Hdd, Keyboard, Optical Mouse ,18.5" Hcl Tft , Head Phone)		
		<b>45</b> (Sahara P- 4 3.40 Ghz, 865 Chep Set Mb 512 Mb Ram, 80 Gb Hdd, 1 Gb Ram, 15" Crt Monitor, Keyboard Mouse)		
		<b>40</b> (Hp 2480 :- Intel Mb 945g, C2d 2.2ghz, 512 Mb Ram,160 Gb Hdd,15" Crt , Keyboard, Usb Mouse)		

		30 (Hcl Infinity Pro: Intel Piv Core2duo,2.8 Ghz,2gb Ram,160gl Hdd, Keyboard, Optical Mouse, 17 Crt)			
		<b>30</b> (Lenovo Duel Core 2.7ghz, 1 Gb Ram, 320 Gb Hdd, 19" Color Lcd, Keyboard, Mouse)			
3	Computer-student ratio	1:4 (523 – 2352)			
4	Stand alone facility	Yes			
5	LAN facility	Yes			
6	Wi-Fi facility	Yes			
7	Licensed Software	25 (20 Application Software & 5 System Software)			
8	Number of nodes/computer with Internet Facility	All the nodes are connected with LAN and all these nodes has internet facility			
9	Any other	<ul> <li>Printer: 76</li> <li>Scanner: 04</li> <li>All the faculty members have been provided individual computer systems with internet facility.</li> </ul>			

### 4.3.2 Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus?

The college has (15 Mbps + 5 Mbps, 1:1 in failover mode) internet facility access on their Laptop and desktop through Wi Fi. There is dedicated internet lab for accessing internet facility during specified hours in computer labs, all the systems are connected with LAN facility. Along with the entire college premises all the hostels are covered with Wi- Fi facility.

### 4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

Our college is always concerned about deploying and upgrading the IT infrastructure and associated facilities and always acts according to the demands such as:

- 1. Computer systems are regularly upgraded/replaced and maintained by the maintenance cell.
- 2. Time to time enhancement of internet bandwidth.

- 3. New acquisition for Servers, Switches, and UPS etc. are planned and procured as per requirement.
- 4.3.4 Provide details on the provision made in the annual budget for procurement, upgradation, deployment and maintenance of the computers and their accessories in the institution (Year wise for last four years)

Year	Procurement(In Lacs)	Upgradation	Deployement/ Maintenance (In Lacs)
2013-14	40.00		13.00
2012-13	15.00		12.00
2011-12	15.00		11.00
2010-11	50.00		10.00

# 4.3.5 How does the institution facilitate extensive use of ICT resources including development and use of computer-aided teaching/ learning materials by its staff and students?

College facilitates extensive use of ICT resources by encouraging students to use internet for completing their assignments, project works and prepare their power point presentations. The college has adequate computer facility for its faculty members. The faculty liberally takes help of the ICT resources to enrich prescribed curriculum with the help of internet. For teaching and presenting the lectures LCD projectors are used in regular teaching and learning process. Faculty members are provided with computers and internet browsing facility for preparation of teaching/learning materials in their respective departments. The college also has seminar halls equipped with projectors and these available when requested by particular faculty. The college also has a fully air-conditioned digital language lab for improving the language comprehension of students. Digital library is available to faculty members for procuring learning materials.

4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching-learning resources, independent learning, ICT enabled classrooms/learning spaces etc.) by the institution place the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.

The college has always been placing the students at the centre of the teaching learning process. The vision and the mission of the college have always been to provide holistic knowledge to its students. Keeping the students' learning at the centre of everything, the college understands that the teachers have to be reoriented from time to time. The times have changed. So has changed the way of imparting the knowledge. Use of technology has become very vital in imparting quality based education. The computer department also organizes training sessions on the use of Internet for learning resources. Well equipped computer Labs, LCD and OHPs are available to the faculty for computer aid teaching. The computer faculty is always available for any need based assistance in the use of ICT.

For example in B.Tech curriculum C programming is the main subject which is mandatory for all the branches. For effective delivery of the concepts of this important subject faculty elaborates the concepts in the class room with the help of LCD projectors. Then the faculty shares detailed notes of the topic on the group email id of the batch. Computers and internet facilities are available to students for resource collection. Students form their concepts on the basis of theses lectures and related study material. The concepts developed by the students are put for common discussion in the presence of the teacher. The practical implementation of this discussion takes place in computer lab for further comprehension.

### 4.3.7 Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?

Yes, the College avails of the National Knowledge Network connectivity through the U.P. Technical University, Lucknow, which is the affiliating university.

#### 4.4 Maintenance of Campus Facilities

# 4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?

The college monitors the maintenance and upkeep of the infrastructure through the subcommittees of the staff and governing body. A detail of the budget allocated during last four years for this purpose is as follows:

Session	S.No	Infrastructure	Budget Allotted (in Lacs)		
2013-14	1	Building	100.00		
	2	Furniture	55.00		
	3	Computer	40.00		
	4	Vehicles	10.00		
	5	Lab Equipment	5.00		
	6	Office Equipment	60.00		
	7	Sports Equipment	5.00		
2012-13	1	Building	225.00		
	2	Furniture	60.00		
	3	Computer	15.00		
	4	Vehicles	10.00		
	5	Lab Equipment	5.00		
	6	Office Equipment	10.00		
	7	Sports Equipment	5.00		
2011-12	1	Building	280.00		
	2	Furniture	40.00		
	3	Computer	15.00		
	4	Vehicles	40.00		
	5	Lab Equipment	5.00		
	6	Office Equipment	10.00		
	7	Sports Equipment	2.00		
2010-11	1	Building	270.00		
	2	Furniture	40.00		

3	Computer	50.00
4	Vehicles	20.00
5	Lab Equipment	5.00
6	Office Equipment	20.00
7	Sports Equipment	2.00

### 4.4.2 What are the institutional mechanisms for maintenance and upkeep of infrastructure, facilities and equipment of the college?

The maintenance and improvement of the campus is under taken with the help of the college administrative officer, who has a team of very efficient supervisors and workers. The college has a centralized maintenance department for the entire campus with full time salaried employees like regular plumbers, electricians, sweepers, gardeners, carpenters, painters etc. The college has a civil/ site engineers for construction and upkeep of college infrastructure. The college has a maintenance cell for ICT support and development. The college also has taken AMC for UPS, ACs services and RO system maintenance. In order to streamline the complaints redressal regarding the maintenance and upkeep of infrastructure and facilities, an Online Complaint Management System (CMS) for lodging and resolution of complaints has been introduced by the college with for the quick redressal of such complains related to maintenance.

### 4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment/ instruments?

Frequent calibration and other precision measures for the equipment/ instruments are carried out internally and as per the requirement. Standard service of sensitive apparatus is carried out by supplying firms. The facilities which are outsourced viz., housekeeping, mess facility, healthcare, pest control security are renewed annually based on their performance which is constantly monitored and reviewed.

### 4.4.4 What are the major steps taken for location, upkeep and maintenance of Sensitive equipment (voltage fluctuations, constant supply of water etc.)?

The College has safe, secure and separate places for the sensitive equipments like electricity generators, water purifiers, chemicals and scientific instruments. The laboratory staff keeps a strict vigil regarding the maintenance and upkeep of the scientific instruments and Chemicals.

Their repair or replacement or another required upkeep is fully undertaken in their supervision. Power stabilizers are provided to stabilize voltage. The college electrician and the supporting staff are responsible for the upkeep of electrical equipments and their maintenance. The college has R.O system which ensures supply of purified drinking water. The college also takes care of regular and routine check up and upkeep of the purifiers and has taken AMC for it.

#### **5. Criterion V - Student Support and Progression:**

#### **5.1 Student Mentoring and Support**

# 5.1.1 Does the institution publish its updated prospectus/handbook annually? If 'yes', what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?

Yes, the college publishes its updated prospectus/handbook annually. It contains the vision, mission, details of courses offered, eligibility, and facilities available which help the students to choose the desired course in this college.

The college publishes its updated prospectus annually. The prospectus consists of all the necessary information the students need to know. It contains the vision, mission, details of courses offered, eligibility, and facilities available which help the students to choose the desired course in this institution. The complete college profile is available in the prospectus. Every year the college publishes its academic calendar for the students. The academic calendar consists of admission schedule, the details of the college working days, the fee details and the rules and regulations which the students need to follow within the college campus. This also contains the list of the facilities being provided to the students, faculty details department wise. The Handbook is revised every year and distributed to every student, faculty and staff at the beginning of the academic year. The same information, which is published in the college prospectus/Academic calendar, is also updated on the college website www.itsecgn.edu.in

# 5.1.2 Specify the type, number and amount of institutional scholarships / freeships given to the students during the last four years and whether the financial aid was available and disbursed on time?

The list of students who had received the scholarships for the last four years:

Year	General	OBC	SC	ST	MINORITY	Total
2013-14	534	164	42	0	30	770
2012-13	188	178	70	0	38	474
2011-12	219	224	82	0	15	540
2010-11	248	217	83	0	0	548

### 5.1.3 What percentage of students receives financial assistance from state government, central government and other national agencies?

More than 25% of the students of the college get benefited from the scholarships sponsored by the government and national agencies.

#### 5.1.4 What are the specific support services/facilities available for?

- \* Students from SC/ST, OBC and economically weaker sections
- \* Students with physical disabilities
- \* Overseas students
- \* Students to participate in various competitions/National and International (students achievements)
- \* Medical assistance to students: health centre, health insurance etc.
- \* Organizing coaching classes for competitive exams
- \* Skill development (spoken English, computer literacy, etc.)
- \* Support for "slow learners" (remedial class)
- \* Exposures of students to other institution of higher learning/corporate/business house
- \* Publication of student magazines

### I.T.S Engineering College provides the specific support/facilities at various aspects for the following:

#### \* Students from SC/ST, OBC and economically weaker sections

At the time of admission itself the students from SC/ST, OBC and economically weaker students are identified based on their authenticated disclosures and the college is maintaining the same record. Besides the Central Govt., the State Govt., and the other N.G.O. sponsored scholarships they are made aware of the different types of schemes that are available to students from the Social Welfare Department & Government. Apart from this the College has poor student fund account in the bank. Some funds from various sponsors are transferred, the amount is utilized for the economically poor students those who are really in need. College management is also very considerate to such students. Full fee scholarships / freeships, stipends, free hostel facilities, free books etc., are made available to students from SC/ST, OBC and economically weaker sections.

#### \* Students with physical disabilities

There is 3% reservation for physically handicapped candidates in admission, in each category viz. S.C., S.T., and O.B.C. Their requirements and needs are given special care and

attention. The institution is committed to accommodate them on the ground floor for their classes. They are provided front-row seating arrangement, comfortable furniture and attendant facility. No such case exists in the college at present.

#### \* Overseas students

As per the AICTE guidelines the admissions are given to overseas students. The college extends its support to overseas aspirants. The college does not have any boundaries to extend its services to any kind of students.

#### \* Students to participate in various competitions/National and International

The college motivates the students to participate in various competitions organized by reputed academic institution. The college depute faculty member to provide specific guidance to the students related to the particular event. The stuents who bring accolade to the college in these events are appreciated and recognized through social media and college website.

#### **Organizing coaching classes for competitive exams:**

For the national/International Competitive exams like GATE, GRE, IES, UPSC coaching is given to needy students. Apart from this training and guidance on soft skills, resume preparation, group discussion, interview questions skills along with short term computer courses like .Net, java, C/C++ etc. are provided by the college for career progression of the students.

#### \* Medical assistance to students: health centre, health insurance etc.

Healthcare facilities are available round the clock at the Surya Hospital, a Hospital governed by I.T.S group. One full time doctor is employed to render 24 hours service, with support from staff nurse. It has 04 beds, 02 consultation rooms and a pharmacy. All treatment, consultation & medicines including lab investigations are done free of cost for all students, staff & staff dependents.

#### \* Skill development (Spoken English, Computer literacy, etc.)

The Corporate Resource Cell (CRC) of the College organizes seminars and workshops in soft skills to orient and train the students towards career and higher education. The CRC caters to the needs in career guidance of students besides organizing training and placement activities regularly. The Cell also organizes Seminars on Entrepreneurial activities. Soft skills, Guest Lecturers from the Industry, Personality Development Classes are conduct by the college regularly which will drive the students towards career enhancement. For rural background and needy students some listening and speaking skills lab sessions are conducted. For

computer literacy PC software Lab is established as a part of the curriculum which helps the students learn the basics of the computer language.

### \* Support for "slow learners".

From each class, slow learners are identified by the class teacher. For a group of 15 students one mentor is allotted by the HOD. The mentor will counsel their students personally. For those students remedial classes are conducted in tough subjects after the normal working hours.

### \* Publication of student magazines.

The College publishes the I.T.S News Letter half yearly. The magazine provides an opportunity for the students to bring out their creative skills. The Articles are contributed by the students as well as faculty. Those articles are published in the magazine under the supervision of the College editorial board. Through the magazine the activities of the college are made known to alumnae and others.

### 5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts.

We are focused towards providing students with the best and nothing less to help our students build strong careers. I.T.S Engineering College, being a fine blend of educationists and entrepreneurs has superior relations with corporate houses and other prestigious institutions. Entrepreneurship development Cell of the college is committed to the cause of encouraging entrepreneurship among students who are very much interested in taking up challenging entrepreneurship as their career. The centre invites various renowned entrepreneurs to share their experience viz., initial challenges in the career and methods to overcome, various avenues in the industry where entrepreneurship is very much possible without much problems. Lectures and awareness programmes are regularly conducted to enlighten the students about the joys and problems of entrepreneurship. Guest Lectures, Business Plan workshops, Case study workshops, are conducted throughout the year to involve the students in the activities that are essential.

Even Banks are invited to conduct awareness programmes on possible ways of funding for budding entrepreneurs.

### **Objectives:**

The objectives of the "Entrepreneurship Development Cell" are as follows:

- To create awareness on entrepreneurship among the students.
- To motivate and develop entrepreneurship abilities among the students.

- To conduct various entrepreneurship programmes like Training programmes, Seminars, awareness camps to promote entrepreneurship among the students.
- To create awareness regarding the sources of help and support available to potential entrepreneurs.
- 5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and co-curricular activities such as sports, games, Quiz competitions, debate and discussions, cultural activities etc.
- \* additional academic support, flexibility in examinations
- \* special dietary requirements, sports uniform and materials
- \* any other

The College has the following Professional Societies which conduct various co-curricular activities:

**AVANTE GARDE** - Department of Computer Science & Engineering

**ENVISION** - Department of Electronics & Communication Engineering

**ERGON** - Department of Electrical & Electronics Engineering

**IMPULSE** - Department of Mechanical Engineering

The College regularly organizes guest lectures by eminent academicians on emerging areas in Engineering and Technology and personality development. Students and faculty are encouraged to attend seminars, symposia and present papers for which the management extends financial support. Each Department conducts meetings of Technical Associations regularly and encourages students' participation.

5.1.7 Enumerating on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIRNET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central /State services, Defense, Civil Services, etc.

The college supports the students appearing in various competitive examinations in the form of study materials and counselling for the right strategies. Students can avail the library facility to refer the books related to entrance test. Students can appear in online examinations using internet facilities at our college.

For effective career guidance, various seminars, workshops and symposiums are being organized all through the year. Students are given necessary information and direction on various career options available for them according to their stream.

Counseling sessions are conducted on regular basis to enlighten the students about the avenues of higher education that are open for them. Training is imparted to those students who appear for GATE and other competitive examinations.

The Corporate Resource Cell (CRC) of the College organizes seminars and workshops in soft skills to orient and train the students towards career and higher education. The Cell caters to the needs in career guidance of students besides organizing training and placement activities regularly. The Cell also organizes Seminars on Entrepreneurial activities.

#### Career guidance cell:

S. No.	Name	Designation	Department
1	Mr. Ashwath Singh Bais	Training & Placement Officer	Department of CRC
2	Ms. Kehkashan Khan	Deputy Manager	Department of CRC
3	Ms. Nilakshi Goel	Assistant Professor	Department of MBA
4	Mr. Abhishek Shivhare	Assistant Professor	Department of CSE
5	Mr. Sandeep Kumar	Assistant Professor	Department of CSE
6	Mr. Jugul K. Gupta	Assistant Professor	Department of ECE
7	Mr. Manveen Chaddha	Assistant Professor	Department of ECE
8	Mr. Navin Kumar Rao	Assistant Professor	Department of EEE
9	Mr. Kamal Asif Khan	Assistant Professor	Department of ME
10	Mr. Manvendra Yadav	Assistant Professor	Department of ME

## 5.1.8 What type of counseling services are made available to the students (academic, personal, career, psycho-social etc.)

#### **Career Counseling:**

For effective career guidance, various seminars, workshops and symposiums are being organized all through the year. Students are given necessary information and direction on various career options available for them according to their stream.

Counseling sessions are conducted on regular basis to enlighten the students about the avenues of higher education that are open for them. Training is imparted to those students who appear for GATE and other competitive examinations.

The Corporate Resource Cell (CRC) of the College organizes seminars and workshops in soft skills to orient and train the students towards career and higher education. The Cell caters to the needs in career guidance of students besides organizing training and placement activities regularly. The Cell also organizes Seminars on Entrepreneurial activities.

#### **Objectives of the Cell**

- 1. To provide information about various careers available in this competitive world.
- 2. To organize career development seminars and workshops.
- 3. To invite companies to interact with students.
- 4. To organize awareness programmes on significant areas.
- 5. To activate resources for needy students to apply for jobs.
- 6. To organize guest lectures on career development by expertise of the field.
- 7. To train the students in soft skills and personality development which are essential for employment and success career.

#### Availability of counseling facility for psycho-social:

Psychological and psychiatric counseling to the students are arranged through guest lectures and interactive sessions by professional councilors. These kinds of activities are arranged for every semester of academic programme.

#### Name of the Counselor:

Dr. Manish S. Kansal, Psychiatrist, Shanti Homes Hospital, Alpha-2, Greater Noida. Apart from the above faculty from each department are allotted as counselors for II, III and IV year students to regularly monitor academic and non academic issues of the students.

Faculties from first year are exclusively appointed as the counselor for the first year students. Resident wardens are available in hostels to deal with psychological and emotional problems of hostel inmates.

#### Medical facility nearby

In case of emergency medical facilities are available at Sharda Hospital, Yatharth Wellness Hospital and Kailash Hospital which are located within 2 Km range from the College.

5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If 'yes', detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the programmes).

Yes, the Placement Cell, launched in 2006, is a one point contact for all companies interested in inducting ITS students in their organization either as employees or interns. Comprising of Head, student representatives and teacher coordinator the Placement Cell has been constituted with the following objectives:

- To act as an <u>interface</u> between the corporate world and the students in order to bridge the gap between them.
- To act as a contact point for all companies who wish to recruit students from ITS
   Students. The Placement Cell will facilitate the placement procedure from the preplacement talks (PPT) to the induction process.
- To assist students in becoming ready for the corporate world by organizing workshops for the outgoing students of the college.

Our Last 3 years trends of placments

- 2010-211 60%
- 2011-2012-70%
- 2012-2013 74%

Last Year (2013-2014) about 88% students were recruited through the Placement Cell and we are expecting to place many more students in the current year (2014-2015).

Apart from academic excellence ITS Engineering College has taken following initiatives in order to strengthen Placements.

- 1) Arranging world class Industry experts to guide students on way forward.
- 2) Regular interface from college to industry
- 3) Mandatory Personality Development Classes
- 4) English speaking classes to break vernacular influence
- 5) Department specific certification and programs .... are list of few
- 6) Orientation of students before appearing in Placement drives.

Some of our prominent recruiters are as under:-

- 1) IBM
- 2) HCL
- 3) AON Hewit
- 4) Accenture
- 5) SYNTEL
- 6) NIIT Technologies
- 7) Minda Sai
- 8) R Systems
- 9) Bosch Engineering Ltd
- 10) Cognizant

### 5.1.10 Does the institution have a student grievance redressal cell? If yes, list (if any) the grievances reported and redressed during the last four years.

Yes the College has a student grievance redressal cell headed by Dean Student Welfare. Moreover, students can also share their grievances with class councellors and HoDs. The necessary action to be taken is discussed in the Grievance cell and appropriate remedial action is recommended. The students can address their problems related to university through the Registrar.

### 5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?

No such cases have been reported till date. A separate Women Empowerment Cell which handles specifically sexual harassment of women both students and staff.

#### **Members**

- 1. Dr. Deepa Singh, Associate Professor, Department of ASH- Convenor
- 2. Dr. Leena Arya, Associate Professor, Department of ECE
- 3. Ms. Preeti Gupta, Assistant Professor, Department of CSE
- 4. Ms. Fareen Fatima, Assistant Professor, Department of ME
- 5. Ms. Himani Goswami, Assistant Professor, Department of MBA

They can also Co-opt two female student members one from B. Tech. students and one from MBA students.

#### **Functions:**

- 1. To receive complaints, if any, from the lady staff and lady students who have been subject to sexual harassment.
- 2. To keep all records intact and in proper order of the complaints received.
- 3. To enquire into such complaints and establish the facts.
- 4. To keep an elaborate process document of each such case describing the methods adopted and the settlement reached in solving the problem.

### 5.1.12 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?

The College has set up a Discipline Committee and Anti-ragging committee. The anti ragging committee is very cautious regarding this menace. The policy of this committee is awareness. It comprises of the Head of the Institution and all the Head of Departments. Faculty members are assigned to monitor the student's activities, make surprise visits and maintain a diary of

his/her interaction with the fresher's and create friendly environment among the seniors and fresher's.

Till date, ragging of any kind has not been reported in the College and Regulations of All India Council for Technical Education (AICTE) which was notified vide F.No. 37-3/Legal/AICTE/2009 dated 01July 2009 are in force. Students and parents give affidavits at the time of joining about awareness and anti-ragging measures and an undertaking not to indulge in them.

#### 5.1.13 Enumerate the welfare schemes made available to students by the institution.

The following welfare schemes are made available to the students:

#### **Scholarships & Free Ships:**

Details about the scholarships, various free-ships are displayed on the notice board of the institution. The scholarship co-coordinator follows up all the scholarships of the students to be the beneficiaries of the various welfare schemes. The College provides them free ship on the basis of their performance in the academics, sports or extra-curricular activities. Similarly scholarships received from various central, state and other agencies are disbursed without any delay to the students.

#### **Students Merit and Performance Improvement Awards:**

The guidelines for deciding above awards shall be as follows-

#### **Students Merit Awards:**

### For B.Tech. 2<sup>nd</sup> year – Top Ten students will be awarded on the basis of 1<sup>st</sup> year result:

Rs. 10,000/- : for top three students.
Rs. 5,000/- : for next three students.

Rs. 2,500/- : for next four students.

## For B.Tech. $3^{rd}$ & $4^{th}$ year – students will be awarded on the basis of previous year result ( $2^{nd}$ & $3^{rd}$ year):

Rs. 10,000/- : for  $1^{st}$  position student in each branch. Rs. 5,000/- : for  $2^{nd}$  position student in each branch.

Rs. 2,500/- : for rest all position students in each branch (3 students per section)

Subject to the condition that no. of students receiving above award should not be more 10% of total strength of students of that branch.

For MBA  $2^{nd}$  year & MCA  $2^{nd}$  &  $3^{rd}$  year - students will be awarded on the basis of previous year result ( $1^{st}$  &  $2^{nd}$  year as applicable only for MCA):

Rs. 10,000/- : for 1<sup>st</sup> position student in each branch.

Rs.  $5{,}000/-$  : for  $2^{nd}$  position student in each branch.

Rs. 2,500/- : for rest all position students in each branch (3 students per section)

Subject to the condition that no. of students receiving above award should not be more 10% of total strength of students of that branch. The award receiving student should have passed the exam, on the basis of which awards are being given, without any back.

### **Performance Improvement Awards:**

In addition to the above awards it was decided to introduce Performance Improvement Awards of `350/- approx. to 10% students of total strength of each class. This award is given on the basis of improvement in the rank of the student in Present Semester over the Previous Semester. In case of B.Tech. 3<sup>rd</sup> Semester Students the basis for improvement in rank will be based on the students of the same branch.

### **Banking Services:**

In collaboration with the Syndicate Bank, the college assists all the students in opening an account with a zero deposit so that students can avail the banking facitlity for their scholarships without extra financial cost. ICICI bank ATM available in the College premises.

### **Counseling & Placement Service:**

For effective career guidance, various seminars, workshops and symposiums are being organized all through the year. Students are given necessary information and direction on various career options available for them according to their stream. Counseling sessions are conducted on regular basis to enlighten the students about the avenues of higher education that are open for them. The Corporate Resource Cell (CRC) of the college organizes seminars and workshops in soft skills to orient and train the students towards career and higher education. The CRC caters to the needs in career guidance of students besides organizing training and placement activities regularly.

#### **Health Services:**

Health care facilities are available round the clock at the Surya Hospital governed by the I.T.S group. One full time doctor is employed to render 24 hours—service, with support from staff nurse. It has 04 beds, 02 consultation rooms and a pharmacy. All treatment, consultation & medicines including lab investigations are done free of cost for all students, staff & staff dependents.

#### **Subsidized Canteen**

The college has cafeteria inside the campus to provide hygienic and nutritive food at subsidized rates to the students during the college hours. The college administration looks after the caferteria so that students get the proper service at reasonable cost.

# 5.1.14 Does the institution have a registered Alumni Association? If 'yes', what are its activities and major contributions for institutional, academic and infrastructure development?

No, the institute does not have registered Alumni Association as of date now. Though the institute organizes alumni meet every year since 2012 in the month of March.

### **5.2 Student Progression**

5.2.1 Provide the percentage of students progressing to higher education or employment (for the last four batches) highlight the trends observed.

Student progression	Percentage against enrolled
UG to PG	10% (approx)
PG to M. Phil.	NIL
PG to Ph.D.	NIL
Ph.D. to Post-Doctoral	NIL
Employed	
Campus selection	40%
Other than campus recruitment	40%
Entrepreneurs	NIL

5.2.2 Provide details of the programme wise pass percentage and completion rate for the last four years (cohort wise/batch wise as stipulated by the university)? Furnish programme-wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating university within the city/district.

**UG-Degree (B. Tech.)** 

Session	No. of students appeared	No of students passed	Percentage
2013-14	369	296	80.43
2012-13	356	265	74.65
2011-12	343	279	83.53
2010-11	250	207	82.80

**PG-Degree (MBA)** 

Session	No. of students appeared	No of students passed	Percentage
2013-14	46	37	80.43
2012-13	53	47	92.16
2011-12	54	41	96
2010-11	57	53	92.98

### 5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?

The college motivates the students for higher studies and research from 3<sup>rd</sup> year onwards. Special care and extra support is given to the students for the preparation of GATE, CAT, GRE, TOEFL and other competitive examinations. The sessions of technical writing are conducted to improve their technical representation skill. Technical sessions are conducted to fill the knowledge gap between the students and industries. Special soft skills and personality development (PDP) sessions are conducted to groom the students so that student progression to higher studies gets increased.

College facilitates student progression to higher level of education and /or towards employment by conducting soft skill & aptitude skill training, through industry-academic interactions and by campus recruitment facility.

The college has well organized Corporate Resource Center (CRC) that assists students for their placement and training. CRC organized many campus interviews through which large number of students got recruited in many reputed organizations such as Aon Hewitt, NIIT Technologies, IBM India, TCS and many more.

### 5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?

Special support is provided by the college to such students who are at risk of failure and drop out. Each department of the college is involved to provide support to these students. Department depute two faculty counselors to each section of the class. Faculty counselors identifies weaker students and try to know the needs of these students in counseling sessions held once in a week. An ample amount of support is provided by each department to such kind of students in following ways:

- Counseling sessions
- Extra classes are conducted for these students beyond the college time

- Personality development sessions
- Remedial classes
- Financial support
- Book Bank Facility
- Study material provided
- Technical writing sessions
- Communication improvement sessions
- Extra time slot is provided in labs

### **5.3 Student Participation and Activities**

### 5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and program calendar.

The college has a large play grounds for games like cricket, football, basket ball, volley ball etc., with all modern facilities. The play ground is fully equipped with flood-lights. A qualified Physical Trainer Instructor Mr. Ravindra Swarnkar is available along with adequate supporting staff.

The Sports Activities organized by the College are as follows:

S.No.	Sports Activity
1	Cricket
2	Football
3	Tug-of-War
4	Volleyball
5	Basketball
6	Table Tennis
7	Chess
8	100m Race
9	Spoon Race
10	Shot-put
11	Long Jump
12	Gymnasium

With this various cultural and extracurricular activities like folk dances, classical singing, group singing, traditional heritage items, fine arts items, Quiz, Literary items are offered to the students. College also organizes annual Sports and annual function in the college campus.

5.3.2 Furnish the details of major student achievements in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. for the previous four years.

#### **Student achievements:**

- Students' Theatre Group 'Ehsaas' secured 2<sup>nd</sup> Position in Inter-college Nukkad Natak Competition at UDBHAV-14', the Annual Fest of Indraprastha Engineering College, Ghaziabad on 8th March, 2014.
- Paras Aggarwal (CSE 3<sup>rd</sup> year Sec-B) got Excellence Certificate in National Network Security Championship -2014 Conducted in I.T.S. Engineering College Greater Noida.
- Tushar Vatsa of EEE branch 2<sup>nd</sup> year, Section-B participated in the group dance event organised by YMCA"Yuvanjuman 2013" All India Invitational Youth Festival October 17-19, 2013. He participated together with other students of ITS. The group won 1st prize in the dance performance. Five participants from the group were also awarded "Certificate of Scholarship" by the "Danceworx Performing Arts Acadmey" for three months academic scholarship at "The Danceloft Project to train and perform on stage (an initiative by "The Danceworx"). The group consisted of nine students of ITS.
- Ravi Aggarwal, B. tech, IT-4<sup>th</sup> year (Batch 2010-14) won following awards:
- 1. Won Flipkart Vouchers worth Rs. 3000 for "The League of Developers" by publishing apps for Nokia Ash S40 Platform on 10th September 2013.
- 2. Has participated in the event "MANTHAN" organized by CAG (Citizens for Accountable Governance) on 2<sup>nd</sup> October 2013 and got short listed in top 100 Teams out of 1400 Teams. They submitted solution in PowerPoint Presentation "Women Empowerment" more then 3000000+ students participated from all over the country. His team won a voucher of Rs.2500 and some goodies by the CAG. The grand finale was honored by the C.M. of Gujarat Shri Narendra Modi.
- 3. Received Nokia Asha 310 mobile phone from "Nokia Premium Developer Program for Asha" on 2<sup>nd</sup> April 2013.
- 4. Won BlackBerry Z10 Limited Edition Mobile Phone and BlackBerry Playbook Tablet from "BlackBerry 10 App Challenge" a contest organized by Devworx in association with BlackBerry for which he had to submit apps for newly launched BlackBerry10 Mobile operating system. He ported android apps to BlackBerry 10 OS and successfully submitted them on BlackBerry AppWorld before 28<sup>th</sup> February 2013.
- Ayush Chitrey & Jitendra Sharma of Final Year EEE (2010-2014) participated in the event "Manthan" organised by CAG (Citizens for Accountable Governance) on

- 2<sup>nd</sup> October 2013 and got short listed in top 100 teams out of 1400 teams in their themes and total teams were 14000. They submitted solution of the problem in PowerPoint Presentation "Stepping Stone: Enhancing the Quality of Primary Education". More then 3000000+ students participated from all over the country. The grand finale was honored by the C.M. of Gujarat Shri Narendra Modi, former CM of Andhra Pradesh Shri N. Chandra Babu Naidu, and Shri. Ram Jethamalni Eminent lawyer and former Union Minister & Shri Arun Jaitley Member of BJP and the event were hosted by Ms Mandira Bedi (Indian Actress).
- Tushar Vats of EEE –II yr Sec B has won first prize in group dance at "GNIT INTER COLLEGE FEAST" held in April 2013
- Sandeep Gupta of EEE –II yr Sec B has won first prize in "Photo Exhibition" held in Sri Venketeshwar College (Delhi University) in Feb 2013.
- Shri Prakash Gupta of IV yr EEE won First prize in Inter college painting competition organized by Greater Noida Catholic youth movement(G.N.C.Y.M)
- Nitesh Sinha and Shubam Rastogi IT final year students presented a research paper on "Cloud Computing: The Dark side" at 1st International Conference On emerging trends in Engineering and Technology ICETET - 2013 Delhi on 14th April 2013.
   This paper has accepted for this International Conference.
- Apoorva Goel Topped MBA 1<sup>st</sup> MBA (2012-14) Year Results and Secured 81.6 %.
- Students of CS 3<sup>rd</sup> year, Hina Gupta and Anuj Yadav made a robot named 'PANZER' which used solar energy to cross a track of 1 meter in Robotics competition held at Thapar University, Patiala on 17th and 18th Oct'08. Out of 75 teams from North Zone of India our students bagged third prize and qualified for the finals of "NEXUS" which was held at IIT, Mumbai on 24th -26th Jan'09 among 12 teams from all over India. In Mumbai, our students could make to the semifinals only.
- Atul Mishra and Harshit Mehrotra of EEE III yr, won 2nd prize in the inter-college quiz competition organized by Indian Society for Training & Develoment (ISTD-Greater Noida Chapter.) The competition was held in I.T.S institute of management on 10April,2009.
- IT Student reached the finale of TV show "Entertainment Ke Liye aur bhi kuch karega".
- Rahul Arya, IT 3rd year student, made I.T.S proud as he participated in T.V. reality show "Entertainment Ke Liye aur bhi kuch karega" on Sony T.V. Rahul won Rs

- 11,111/- in the first round for his incredible sand art and also reached the finale of the show. His performance was highly appreciated by show judges Anu Malik and Farah Khan. The episodes were telecasted on 15 Sept, 2009 and 18th Sept, 2009 respectively.
- Kailash Narain Verma (EEE-IV yr) & Vishakha Chaudhary (CSE 1st yr) won 1st
   Prize in Table Tennis mixed doubles competition organised by Indian Business
   Academy, Greater Noida during the Annual technical fest "Spardha-2010".
- Pranshi Agarwal (ECE-IInd Yr), Kirti Paliwal (ECE-IInd Yr), Anubhav Srivastava (ECE-IInd Yr), Monika Singhal (ECE-IInd Yr) secured IIIrd position in "Robothan" organised by Institute of technology & Management, Gurgaon, during the Annual technical fest, on 30th-31th March' 10.
- Harshika Singh, Rajat Srivastava and Akshat Garg of ECE Dept. participated in GraVITas organized by Vellore Institute of Technology (VIT), Vellore during Sept 17-19, 2010. GraVITas is an International Knowledge Carnival having wide ranging events like paper presentation, live models in different categories, quizzes; etc. They competed in the Line Follower event under the Robotix section and won the third prize. This event required robots to follow a line. The Robot that accomplished that goal in the shortest time was adjudged the winner.
- Students of EEE 7<sup>th</sup> sem Piyush Sharma, Vikas Sharma, Brijraj Singh, Vivek Singh and Pradeep Kumar attended an IET international conference on "Smart Grids" held at Crown Plaza, New Delhi on 27 August, 2010.
- Sanchit Garg and Shailendra Singh, students of MCA final year, have won first and third prize respectively in the "Inter Institute Competition of Debugging in C" held on 28 Oct 2010 at IIMT, Greater Noida.
- Students of I.T.S Engineering have participated in 'All India Essay Writing Event' organized by Shri Ram Chandra Mission in collaboration with the United Nations Information Centre for India and Bhutan (UNIC) in commemoration of UN International Year of Youth (Aug 2010-2011). The topic for the competition was "From Ambition to Aspiration, From Acquiring to Becoming". Nearly 500,000 students from 11,554 institutions participated in this competition. The intention behind this event has been to connect with the youth of our nation and help them to look within themselves for answers to problems that plague our world today. Kushagra Sinha, Student of ME-IV Year, received the Best Entry award from our

College. The College has also been given a 'Certificate of Appreciation' for its outstanding contribution to the success of the event.

### 5.3.3 How does the college seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?

The college has a well defined mechanism of obtaining the online feedback from the students to improve the performance and quality of the institutional provisions. Each semester the college is collecting feedback from students, twice in a semester for improving the quality of education in the college in all aspects. The feedback can be used to:

- Improve the teaching quality.
- Find out the academic and non-academic related problems.
- Improve training and placement activities.
- Enrich teaching learning process.
- Develop faculty-student relationship.

From analyzed feedback of exit students, the college conducted Extra classes for soft skills and coaching is given for competitive exams to get jobs as well as higher education.

The college has a mechanism to seek and use data and feedback from its employers to improve the growth and development of the institution. The Feedback is obtained by the interaction of Director with the faculty members and other staff members. The Feedback is also obtained from our Alumni to know about their competency and performance

### 5.3.4 How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazine, and other material?

The College encourages its students to publish materials like college magazine, wall magazines etc. The students are motivated to express their talent through articles, paintings, and graffiti. Their Creativity is given a free flight. The college magazine provides them with a platform to express them. The teachers motivate the students to bring out the creative genius in them. The college also encourages the staff members to attend conferences and to publish papers in national and international levels. Following are the details of the publication made by the college:

- A quarterly news-letter "ITS News" is published by the college. Dr. Rashmi Gupta is the Editor in chief of the ITS News letter.
- College Magazine is initiated to be released from this academic year.

• News-letter "ITS News" also available on the college website.

### 5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.

No, the college has no student council or any other similar body.

### 5.3.6 Give details of various academic and administrative bodies that have student representatives on them.

Various committees are constituted with a senior faculty as Chairman to monitor the maintenance of academic infrastructure and facilities. The institute believes in giving the equal opportunity to the students in supporting the authorities in different affairs of the college. For this the college endeavors to provide them with opportunities to participate in the various bodies. The details of having students 'representation are:

- Cultural Committee.
- Class Representatives.
- Hostel Committee
- Anti Ragging Committee
- Student Grievance cell
- Women's Grievance cell
- Career Guidance cell
- Entrepreneurship cell
- Training and Placement cell (Corporate Resource Cell)
- R&D Cell
- College Newsletter/Magazine Committee
- Medical and First Aid facilities
- Telecom
- Internet facilities
- Electrical Maintenance
- Work shop (IT & MECH)
- Corporate Social Responsibility Cell (CSR)
- SC/ST welfare committee
- Transport committee
- Water committee

- Sports committee
- Literacy Club
- IETE Student Chapter
- IEEE Student Chapter
- Departmental Societies / Associations

Coordinators of various committees are empowered to take remedial steps for smooth functioning of the institution.

### 5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution.

The college alumni committee keep in touch with the past students and faculty members of the college. The college makes the best effort to invite its Alma Mater in the college for carrer guidance and know about the courses available for higher education, add on programs and competetive exams. The college has establish Alumni Association and try to keep in touch its alumni thourgh annual alumni meet, internet and social media.

- Alumni committee has been formed with alumni student coordinators.
- The college organizes Annual Alumni Meet
- A Web page is provided for the details updating for Alumni in our college website, and a group mail has also been created for the Alumni students.
- The college always invites the Alumni and former faculty members to participate in various functions like annual fests, workshops, seminars, conferences etc. organized by the college.
- Staff and the Heads of the Departments maintain rapport with the Alumni.

### 6. Criterion VI: Governance, Leadership And Management

### 6.1 Institutional Vision and Leadership

6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?

#### Vision

• To become the technical institute of the choice by disseminating globally acceptable education, effective industrial training and relevant research output.

#### Mission

- To make incessant endeavor to create learning processes in response to changing technical paradigm.
- To make organized efforts for identification, monitoring and control of objective attributes of quality for continuous enhancement of academic processes, infrastructure and ambiance. We also aim to generate high quality human and knowledge resources in core areas of competence and in emerging areas to make valuable contribution in technology for social and economic development of the nation.

#### **Long Term Goals**

- To forge strong alliances with National and International organizations for academic and R&D activities in thrust areas of Engineering and Technology.
- To reach the pinnacles through continuous nurturing and updating of intellectual skills to stimulate the qualitative teaching and learning practice

### **Short Term Goals**

- To establish active Industry-Departmental interactive programs for students and faculty in teaching and research areas.
- To achieve academic efficiency with the help of experienced committed mentors and mould them to be proficient technocrats and managers of the future country.

### **Quality Policy**

- To vigorously pursue continual improvement of teaching learning process of undergraduate and post graduate programs in Engineering & Technology.
- To provide state of art infrastructure and expertise to impart the quality education.

### 6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?

The top management, Director, HoDs and other faculty members of the college works in a coordinated manner towards the successful achievement of the long term and short term goals of the college. In order to increase the role of faculty members in decision making and for the effective implementation of the various steps required to achieve the quality policy of the college the faculty members are required to act as the convener or co-convener of several crucial committees like Research Cell, Training and Placement Cell, Anti-Ragging Committee etc. The Director of the college is empowered to take all the necessary steps and guidelines to maintain the atmosphere conducive for enhancing the educational content and setting up the internal procedure to achieve quality performance of the college in accordance with the top management perspective. The Director and the HoD monitor the improvement through objective measurements. The Director along with the HoDs interacts periodically with top management to get more insights for effective implementation and review of the progress essential for fulfilling the vision and mission of the college.

### 6.1.3 What is the involvement of the leadership in ensuring?

- The policy statements and action plans for fulfillment of the stated mission
- Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan
- Interaction with stakeholders
- Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders
- Reinforcing the culture of excellence
- Champion organizational change

The leadership of the college strives for achieving the quality policy of the college by maintaining clarity in authority and delegation so that a transparency in communication at different level can be achieved. The leadership tries to create equal opportunity among the staff to build a healthy organizational culture. The Director and HoDs provide clarity in roles at each level along with job content and responsibility. The leadership tries to promote the

participative style of management through proper decentralization mechanism and motivate the employees to take part in operational decisions.

The Director holds the ultimate responsibility of coordinating the academic and administrative function of the college. He executes the decisions of the governing body. He is responsible for maintain harmonious relations and resolving the conflicts at all levels through the stakeholder's involvement. The HoDs in consultation with the Director provide the code of conduct for faculty members with regard to work schedule and other crucial matters.

## 6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?

The HoDs formally interact with the faculty members periodically to review the progress related to departmental activities. The HoDs and representatives of the various committees frequently meet the Director at institution level for providing feedback from the stakeholders so that the effective monitoring can be done and deviation from the framed policies and plans can be minimized by effective implementation of the plans required to achieve the objectives. The Students feedback forms and faculty appraisal forms provide vital information required to effectively implement the policies and plans of the institution. The college also takes into consideration the various reviews given by committees consisting of faculty members for accomplishing certain task.

### 6.1.5 Give details of the academic leadership provided to the faculty by the top management?

The top management of the college is eager to develop the 'intellectual leadership' among the faculty members and to achieve this the management motivate the faculty members to participate in various faculty development programs organized by the institute of national importance. The college promotes both individual and collaborative research so that a leadership in research can be obtained. The college has the policy of providing financial aid as well as incentive in form of promotion for faculty members who aspire for self-development activities in line with the goals and objective of the college. Similarly, the management of the college has well defined policy for recognizing the performance of the faculty members and the Director of the college has been given the authority for pooling the academic resources, best practices and experiences.

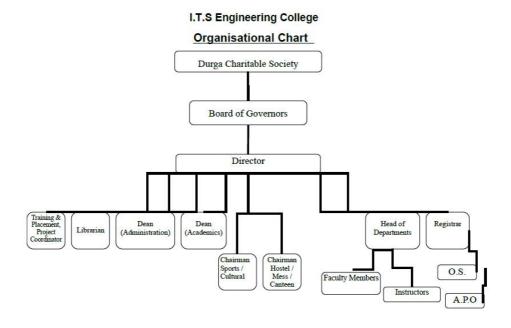
### 6.1.6 How does the college groom leadership at various levels?

In order to inculcate the culture of leadership at various levels in the college several committees and sub-committees have been developed who take decision at operational level. The senior faculty members have been involved in the committees as coordinators and they give their suggestions based on their experience and feedback on several crucial matters of the college. The faculty members are encouraged to participate in regular training and motivational programs organized by the college as well as other external bodies.

The faculties at various levels are empowered to take decision and the flexible organizational structure encourages the faculty members as well as other staff members to give suggestions for improving the efficiency of the decisions making process in transparent manner.

## 6.1.7 How does the college delegate authority and provide operational autonomy to the departments / units of the institution and work towards decentralized governance system?

The director as the Head of the Institution is responsible for coordinating the academic and administrative function of the college. To assist the director for smooth functioning, the HoDs have been delegated with administrative authority and advisory committees consisting of faculty members have also been formed for taking decision regarding crucial academic matters. The organizational chart of the college is shown below:



### 6.1.8 Does the college promote a culture of participative management? If 'yes', indicate the levels of participative management.

Yes, the college promotes the culture of participative management and the organizational chart provided in sec 6.1.7 clearly indicates the delegation of authority in the college for the smooth functioning of college administration. All the administrative component work in tandem as an effective team to achieve the goals and objective of the college. In order to coordinate the various committees without any ambiguity the coordinator or convener is responsible for maintaining the rapport.

#### **6.2 Strategy Development and Deployment**

### 6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?

Yes, the college has formally stated quality policy. It is deployed and reviewed by the information gathered from students, parents and various committees on teaching learning process. College has a documented quality policy and this policy has been displayed at various department and locations. In order to maintain the quality objective the internal audit system has been adopted and the quality management system is periodically reviewed by committee comprising of the Director and all HoDs so that the deviation from the actual objective can be controlled by formulating more effective goal oriented tasks.

### 6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

Yes, the college has a perspective plan for development. The various aspects included in the plan are the identification of the area of improvement so that academic excellence can be achieved and provisions to offer the best infrastructure along with the adoption of best educational practices so that the defined objectives can be attained. The aspects to be included in the plan are drawn from the recommendations of the various committees.

#### 6.2.3 Describe the internal organizational structure and decision making processes.

The college has Board of Governors comprising of eminent personalities from the field of education, industry and bureaucracy. The Director of the college is the member secretary of the board. The major decision related to finance, organizational structure and expansion are finalized by Board of Governors. The board has the final authority on taking decision related to annual budget. The Director is the administrative head of college and convener of the governing council which regularly review the operational issues of the college.

### 6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following

- Teaching & Learning
- Research & Development
- Community engagement
- Human resource management

#### • Industry interaction

#### **Teaching & Learning:**

The college emphasizes to upgrade the teaching methodology by bringing more and more innovative pedagogies and delivery methods. Some of the strategies adopted for this are:

- Faculties are advised to take remedial classes for weak students
- Industrial tours are organized for students to acquire more practical knowledge
- Adoption of digital learning technology
- Motivating the students for presentations and group discussions
- Interactive sessions with peer and experts

#### **Research & Development:**

In order to motivate the faculty members and students for research related activities which is vital component of academic arena the college authority has adopted the following measures

- The college motivates the faculty members to register for PhD program as a part of continuing education.
- To engage the faculty members in AICTE/DST/ARB funded projects
- To provide seed money for initiation of research activities
- Research Cell has been developed to identify the feasible research areas and prospective research opportunities.
- Motivate the faculty members for collaborative research in association with various funding agencies, industry etc.
- To actively participate in different professional bodies

#### **Community engagement:**

The college along with the academic objectives also gives prime consideration to the community services to make the students a socially responsible citizen. The college encourages faculty members and students to organize various activities and programs related to community development throughout the year. The college promotes mass tree plantations in and around the college and provides food, clothes and other needs to poor children by engaging the students .The college has always been taken a lead role in serving the people when they suffer from natural calamities.

#### **Human Resource Management:**

The college has well defined documented procedure for recruitment. The recruited faculty members are trained as per the need and encouraged and involved in the process of decision making and execution as per their aptitude and area of interest and expertise. Faculties are

encouraged to take part in various developmental activities like attending and organizing conferences, seminars at National & International levels.

### **Industry interaction**

In order to enhance the industry interaction with the college to provide more practical exposure to the students as well as faculty members the following activities have been initiated by the college

- Industrial Visits
- Guest lectures by professionals from industry and academics.
- Inviting industries for in-house training to students and faculties in specific domain
- Professional Societies/Bodies
- Industrial summer training of students.
- Campus placement

## 6.2.5 How does the Head of the institution ensure that with adequate information being available (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?

The Director as the Head of the institution ensure that adequate information is available for top management and stakeholders to review the activities of the institution through

- Collecting Feedback from students periodically
- Taking feedback and suggestions from Parents on periodical basis.
- Continuous process of counseling and mentoring mechanism by faculty coordinators
- Periodical meetings of HoD with class counselors.
- Alumni association recommendations to enhance the academic excellence
- Monitoring student learning experience outside classroom with sustained learner care throughout the year
- Assessment through Well-designed evaluation on the effectiveness of teaching and measuring the learning outcomes of the students.

### 6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

The college plays a very vital role in motivating the faculty members to come forward to initiate and gain competitive edge through role in decision making by following activities:

- Heading various committees at college level.
- Empowering the individual faculty through decentralized functioning mechanism.
- Great level of flexibility in academic administration to make decisions
- In designing the required training programs and updates it needs
- In preparing annual plans
- Freedom of action and decision
- Freedom of thought and expression
- Idea generation and implementation
- Providing feedback to determine the degree of the positive impact on any proposed activity by the department/college
- Formal/Informal gatherings with the Management periodically

### 6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.

The following resolution has been made by the Management council in the last year and the same have already being implemented:-

- To impart the excellent knowledge based education to the students
- To develop the overall personality of the students with good communication skill
- To increase the opportunity for campus placement of students in leading industries
- To bring the institution in the category of Best Engineering College of the country

# 6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If 'yes', what are the efforts made by the institution in obtaining autonomy?

Yes, the affiliating university i.e. UPTU has the provision to accord the status of autonomy to its affiliated institutions. The college does not have any plan of obtaining autonomy in near future.

6.2.9 How does the Institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder relationship?

The college has set up a grievance redressal cell comprising of the Director, Registrar, all HoDs and senior faculty members to attend each and every complaint. The college tries to immediately address the problems by providing feasible and effective solution. Every Faculty, staff & student is free to approach the cell.

6.2.10 During the last four years, had there been any instances of court cases filed by and against the institute? Provide details on the issues and decisions of the courts on these?

No

6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If 'yes', what was the outcome and response of the institution to such an effort?

Yes, the college has a mechanism for analyzing student feedback on institutional performance. A well defined feedback system has been adopted by the college to monitor the various parameters related to academic matters. Moreover the feedback from alumni and exit survey from the students are used to rectify the area where action is needed. Students can also submit their problems or suggestion in writing through 'Suggestion Box' placed outside the administrative office.

### **6.3 Faculty Empowerment Strategies**

### 6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non teaching staff?

The following activities/policy/plans has been adopted by the college to enhance the professional development of its teaching and non teaching staff

- Motivating the employee for achieving excellence in education by enhancing his/her capabilities and skills.
- By organizing computer training programs for the non-teaching staff to acquaint them with the latest techniques and software.
- By sending the faculty members for seminars/conferences/workshops/ orientation programs in various institutes and universities.
- Multi-factorial transaction involving teachers, students, learning resources, training centers, institutional links and academic management.

# 6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?

- Faculty members are trained in their respective domain by providing them opportunities
  to attend various programs organized by reputed educational institution, corporate bodies
  etc. Faculty can avail the complete support (updated library, computer labs) for
  knowledge up gradation.
- By involving the faculty in the decision making process at various levels
- By organizing Faculty development programs/ workshop/seminar etc periodically to update their knowledge in specific areas of their interest.
- Pooling their academic resources, best expertise and experiences.

## 6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.

A self appraisal report is submitted by the faculty & staff at the end of the academic session which is analyzed by the Director and the Managing Committee. The performance of the Faculty members is graded as per the given scales. Periodical reviews on classroom teaching

by HoD and feedback from all the stakeholders of the college are the essential components of performance appraisal.

# 6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?

On the basis of the performance appraisal report the increments and promotion of the employee is decided and the outcome of the feedback is communicated to the employee for necessary action with suggestion regarding the scope of improvement.

### 6.3.5 What are the welfare schemes available for teaching and non teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?

The following welfare schemes have been implemented in the college for teaching and non teaching staff

- The Institute has residential facility with the college campus for both teaching and non teaching
- Transport facility
- Health care
- Provident Fund
- Canteen, ATM and Reprographic facility
- Reimbursement of fees for two children to class IV employees
- Dental card for free dental checkups

### 6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?

The college is providing all the facilities like fair reward system and timely promotions including the sixth pay salary as per the AICTE norms to retain the eminent faculty. The college has very well defined and transparent promotion and reward schemes for appraising the work of faculty. All the faculties are given opportunity for academic up gradation and incentives are given as per their qualifications and skills. The college gives paid leave including summer and winter break to all faculty members. A very ethical and academic conducive atmosphere prevails in the college which helps to retain good faculty.

#### **6.4 Financial Management and Resource Mobilization**

### 6.4.1What is the institutional mechanism to monitor effective and efficient use of available financial resources?

- Internal Audit System is in place. All the accounts are audited by the certified chartered accountants.
- All proposals for major purchases are approved by the managing committee after full justification and old stock being taken into consideration.
- At the beginning of the session the annual budgets for finance as well as man power are prepared/reviewed and approved by the managing committee.

# 6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.

The governing body of the College consisting of university and AICTE nominee, management representatives and other industry and academic members preview financial year budget proposals including Income & Expenditure details. The proposals are made on different heads such as laboratory equipment, library expenses, salary payments, building infrastructure and other maintenance expenses.

In the college there is an internal audit system which where the utilization of various resources, and the related receipts, bills and vouchers, supporting documents are verified periodically to ensure the proper utilization of the resources.

#### **External:**

External Audit Committee verifies the income & expenditure details of the college as per the balance sheet.

6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.

As the college is self financing institution the major source of income is mainly from tuition fee receipts from the students, as fixed by State Government of Uttar Pradesh. In addition to that the bank loan provided to the college is also used to meet the capital expenditures.

The expenditure mainly consists of salary payments, laboratory equipments, Library, infrastructure & building infrastructures and maintenance. Deficit is met through the Management of the Institute by its own recourses.

### 6.4.4Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).

The college secures the additional fund through

- Scholarship Grants of the Govt. of Uttar Pradesh.
- Conducting online examinations

- **6.5 Internal Quality Assurance System (IQAS)**
- **6.5.1 Internal Quality Assurance Cell (IQAC)**
- a. Has the institution established an Internal Quality Assurance Cell (IQAC)? If 'yes', what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?

Yes, the college has established an Internal Quality Assurance Cell. The quality assurance processes with regard to academics, administrative are the integral part of the institutional policy. IQAC contributes to the institution allocation of the quality assurance processes:

- To provide benchmarks for higher academic standards, quality teaching-learning, evaluation and research.
- To review, upgrade, maintain and to modernize the administrative aspects.
- To review and recommend the annual plan of the institution for effective implementation.
- b. How many decisions of the IQAC have been approved by the management / authorities for implementation and how many of them were actually implemented?

All the above decision as furnished in 6.5.1 a are approved by the management and all are being implement in the intuition

c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.

Yes, the IQAC have members from the industry and academia to decision making process more democratic with inputs from their fields of their interest and expertise.

d. How do students and alumni contribute to the effective functioning of the IQAC?

The college invites the students and alumni in various functions where they interact with staff members, Director and members of managing committee to provide their feedback and suggestions. These suggestions are taken up by the IQAC.

- e. How does the IQAC communicate and engage staff from different constituents of the institution?
- IQAC meets at regular intervals.
- IQAC communicates its suggestions, recommendations and observations through the Head of the Department.
- 6.5.2 Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If 'yes', give details on its operationalisation.

All the academic bodies of the college interact with IQAC. The advice of IQAC are followed and implemented carefully.

### 6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If 'yes', give details enumerating its impact.

Yes the college provides training to staff for effective implementation of the Quality assurance procedures. The impact of such trainings can be summarized as follows:

- All staff get oriented towards the defined goals and objective which increases the operational efficiency
- Faculty is exposed to latest requirements
- Job Challenges
- Orientation of student's proficiency.
- Successful career achievements

## 6.5.4 Does the institution undertake Academic Audit or other external review of the academic provisions? If 'yes', how are the outcomes used to improve the institutional activities?

Academic audit is essential for continuous monitoring of the students academic performance. In addition to that the affiliating university regularly monitors the performance regularly. The following factors are taken into consideration for academic review

- Monthly attendance of students
- Internal Exam Marks
- Marks obtained in external exam conducted by the university
- Semester wise performance and comparison with other University affiliated colleges.
- The number of seminars, workshop and conferences organized by each department and the number of students participated.

The Faculty members with good results are appreciated. On the other hand, Faculty members with lower/unsatisfactory results are advised to improve. This exercise strengthens the academic standard of the Institution.

6.5.5 How is the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

Execution of plans and pedagogy decided by the IQAC is always in consonance with the plans of the affiliating University and guidelines received from the AICTE. Furthermore, inputs given by external recruiting agency is incorporated in the form of training and other practices. The academic performance in the form of cut-off marks for being eligible for interview is maintained and students are advised to maintain the minimum requirements.

## 6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?

Continuous review of the teaching learning process takes place in the college by considering the inputs from the student's feedback. These inputs are not only used to highlight the major drawbacks of the teaching-learning mechanism adopted by the college but also to evaluate the teaching ability of the faculty so that a corrective action can be taken to minimize the deviation from the desired target.

- Head of the department review the progress of the syllabi, the performance of the faculty and performance of the students.
- The progress report of the departments is conveyed to the Director by the respective heads of the departments.
- Separate student's counselor is available for each class who act as mentor and advisor to the students.
- Detailed lesson plan and subject-wise lecture notes are required to be prepared by each
  faculty members. The faculty members have to furnish assignments to students for their
  assessment.
- Lab manuals are prepared by the institution and made available to the student so that the students can co-ordinate their theoretical concepts with practical application in more refined manner.

### 6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?

Any other relevant information regarding Governance Leadership and Management which the college would like to include.

The college periodically communicates its quality assurance policies, mechanisms and outcomes to the various internal stakeholders through various channels depending on the

nature of information. The college communicates with the various internal and external stakeholders through newsletter published by college, website and by using social media. Meetings with various stakeholders are also held. Progress report and other related information of the students is sent to the parent's for their non compliance with targeted academic policies.

#### 7. Criterion VII - Innovations and Best Practices

#### 7.1 Environment Consciousness

#### 7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?

There is no formal system of green audit of college campus and facilities. However, the college understands the importance of eco-friendly atmosphere in the campus and is committed towards establishing eco-friendly campus. Ample measures have been taken to make the campus neat and green. The college has a large variety of trees and plants in college campus. Entire lawn and play ground is equipped with water sprinkling system and there is a team of gardeners to take care of the plantation.

#### 7.1.2 What are the initiatives taken by the college to make the campus eco friendly?

- \* Energy conservation
- \* Use of renewable energy
- \* Water harvesting
- \* Check dam construction
- \* Efforts for Carbon neutrality
- \* Plantation
- \* Hazardous waste management
- \* E-waste management

The college has adopted various measures to make the college eco friendly. The management, director and the staff members are dedicated to this cause and they all strive to enlighten students about environment consciousness. A brief description of the various steps taken by the college is given below:

#### **Energy conservation**

To aware the staff members and students about conservation of energy, slogans are displayed at the prominent places of the campus. The college has solar water heating systems and solar power plant to save electricity and fuel to make the environment smoke free, green and clean. The college has three hostel blocks and they use zero electricity for heating water during winters. Approximately 15000 liters of water is heated daily using solar energy systems for which sufficient numbers of solar heaters have been installed on hostel rooftops.

To decrease its dependence on conventional energy and give an impetus to the use of non-conventional energy sources, college installed a 50 KW solar power plant which is

synchronized with UPPCL power line. Encouraged by its success the college is planning to install a bigger capacity solar power plant.

#### Use of renewable energy

Solar energy is a major form of renewable energy sources and the college fully utilizes it to reduce electricity consumption significantly. Solar energy is vast and inexhaustible resource for electricity generation which offers a clean alternative to the fossil fuels that currently pollute our air, water and contribute to global warming. The college has a modern well structured solar power plant and solar water heating to fulfill the requirement of the energy.

#### Water harvesting

All of us are aware of the situation in near future where we will be forced to face acute shortages of water if we ignore to do something now. With this thought in mind the college very aggressively went for rain water harvesting in our colleges to replenish the ground water. College has four collection points where rain water comes through dedicated drainage system. The college has 8 inch reverse borings and these reservoirs replenish the ground water. As of now the college has two reverse borings in parking areas, one under the stage of amphitheatre and another near amphitheatre.

#### **Check dam construction**

No

#### **Efforts for Carbon neutrality**

The entire college campus is densely covered with green trees which ensure Carbon neutrality in and around the campus area.

#### **Plantation**

The College has more then 2000 trees in campus area. Apart from these trees there are full variety of hedges and plants all along the internal roads and in front of all the blocks. The garden inside the college is well maintained with the seasonal plants and flowers. We intend to plant more trees in near future as well.

#### Hazardous waste management

The college makes efforts to ensure that no Hazardous waste is generated in the college campus. And if at all some hazardous waste is generated as in chemistry lab it is treated with utmost care. All the harmful chemicals are kept with care at safe places to avoid any accident caused by them. Unused chemicals are disposed off in diluted and neutralized form. These chemicals are drained through underground and securely covered drains so that they not exposed to the air.

## E-waste management

The old computers, printers, and other electrical & electronic devices are disposed timely by selling it to the vendors for recycling and reuse. The printer's cartridge is refilled outside the college campus through vendors to prevent generation of E- waste in the college campus.

#### 7.2 Innovations

# 7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.

The college has been scaling new heights ever since its inception. The college has made several innovations which have helped smooth functioning of the college. These innovations are in academics, administration and other levels of the college working.

#### **Academics Innovation:**

**ADR AWR**: To assess the productivity and progress of the classroom teaching the college has in place the system of maintaining ADR & AWR. All the faculty members have to update them regularly and make the changes as and when required.

**Online Daily Attendance**: The College monitors the daily attendance of all its students through online attendance system where the faculty fills attendance on Google drive sheet which is shared with the director and the concerned head of the department.

Online Feedback System: To evaluate the efficiency of the teachers in class room teaching the college has evolved the system of online feedback. Here students give access their teachers on certain parameters. This feedback helps teachers to know the required area improvement.

**Less Paper Work:** All the students, faculty and staff members have college mail id for all kinds of formal official communication. This helps to reduce the use of paper to a great deal.

**Incentive to faculty for Paper Publication**: To motivate the faculty members to progress further in their area of academics and research the college provides them certain incentive for publishing papers in journals of high repute.

**Performance Improvement Award:** For encouraging students to continuously improve their academic performance the college facilitates those students who show marked improvement in their university results.

**Star Performance Award for Faculty**: The College facilitates Star Performance Award for those faculty members who deliver the best university results.

#### **Administrative Innovation:**

**Solar water heating & Power Plant:** The College has a modern well structured solar power plant and solar water heating to fulfill the requirement of the energy.

#### **Flood Light:**

For conducting sports & cultural events at night, without any interruption the college has arrangement of flood lights in the main campus ground.

**Rain Water Harvesting:** The College has four collection points where rain water comes through dedicated drainage system which fulfills the requirement of water.

**Tobacco Free Campus:** The College has started the drive to make the campus tobacco free in all its form. Several slogans highlighting the harmful effects of tobacco consumption have been displayed at prominent places.

**Grievance Boxes:** Grievance boxes have been installed at old reception area on the college campus to know and keep track of the grievances of students, parents, and the public, as also to know their views and to receive suggestions.

**Language Lab:** The Language Lab is used for developing effective communication skills and overall personality of students.

Various Committees (Anti Ragging, Women Cell etc): In order to make the campus safe and secure for all its student and female staff and students, the college has set up various committee to address issues related to students welfare and women empowerment.

#### **7.3 Best Practices**

7.3.1 Elaborate on any two best practices in the given format at page no. 98, which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.

#### **BEST PRACTICE (A)**

#### 1. Title of Practice:

Performance improvement awards for students and faculty

#### 2. Goal:

To motivate students and faculty members for achieving the high standards of teaching and learning, realizing their complete potential and for developing a healthy competition among students and teachers so that they can channelize their energy towards achieving higher academic goal.

#### 3. The Context:

The college understands the need of inspiring its students time to time as in this is an age, not only of cut-throat competition but also of so many distractions and students in absence of any motivation sometimes fail to give their best. On the other hand some students who are focused and dedicated to their goals of academic excellence also need some encouragement to keep giving the best output. Therefore, keeping in view the importance of awards and recognition the college has launched the concept of felicitating its students on the basis of their academic performance. The basic thought behind this unique concept is to give emphasis to student centric learning system and attempts to improve the professional capability of students across the entire spectrum which includes both the weakest to the brightest student. Efforts have been made to encourage and pay special attention to weak students by making them feel equal with bright students.

The college also understands the need to motivate its faculty members in order to keep their spirit high and to encourage them to give their best to the students in teaching. Realizing this need of appreciation for teachers towards their hard work and sincerity, the college duly acknowledges their dedication and rewards its best faculty members through "Star Performer Awards".

#### 4. The Practice:

The practice of rewarding the diligent students is based on the process of analyzing and comparing the students overall academic achievement during a semester. This includes a student's performance not only at the university level but also marks achieved by a particular student in the sessional tests and pre university exams held at the college. There are two

categories of awards. Merit awards have been given to the students who did excel in academics and secured the maximum marks/percentage in the particular semester/branch. Performance improvement award are given to the students who made outstanding performance compared to the previous semester. This category of awards has been started with the vision of boosting the morale of students who could not deliver the result as per expectations due to certain reasons, such as due to some medical problem, late admission, problem of adjustment with the new environment, or at times some mishap at the family level. Once given an opportunity these students put their best foot forward and deliver as per expectations, therefore the college feels the responsibility of motivating these students to so that they do not loose the track again. Awarding such students ups their morale considerably and students too strive their best to give the results. Departments also reward their meritorious students on the basis of their performance in the particular subjects.

For rewarding its faculty the college selects faculty member on the basis of their university results and the college also takes into account the feedback given by the students to the concerned faculty.

#### **5. Evidence of Success:**

The practice of rewarding not only the bright students but also the average students who have shown the marked improvement in academics has resulted in significant gain in academic standard of the students. The failure rates have been reduced significantly and the college has achieved the best results in terms of pass percentages. The overall quality improvement is evident from the high class averages and a large number of students from the college are getting good placements. The college has consistently maintained itself in the category of premiere institutes of the region. The policy of awarding the faculty members for achieving higher results has shown consistent improvement in the quality of teaching.

#### 6. Problems Encountered & Resources Required:

As the practice mentioned above is initiated with a positive attitude there is not much problems encountered so far. Some problems that arise are of minor nature and are tackled with utmost care, to avoid any sort of conflict.

Sometimes a student achieves the best marks in the entire subject, therefore instead of awarding the same student for getting good marks in different subjects, the award is divided into different categories and students getting the second best marks in these subjects are also awarded for their performance.

i. At times two students get the same percentage of marks in such situation, both the students are rewarded equally.

ii. The college provides all the resources for this felicitation of its students and faculty members. Departments also contribute at their level for smooth conduction of these awards successfully.

#### **BEST PRACTICE (B):**

**Title:** Value Added Courses for improving the student's employability.

#### Goal:

- 1. To provide required industrial training, and other skills to students in order to improve the employability and technical skill of young technocrats.
- **2.** To generate industry ready engineers who can participate in current tough job market confidently.

#### The context:

We are in the era of tough job market. Industry continuously requires the fittest person to fulfill this need. One of the major problems for engineering and technical education is acquiring good job options. The lack of industrial skill as well as soft skill among the students further increases the gravity of this problem. The required skill in job market is changing everyday and so the demands and expectations of the employer. To prepare our students to meet the challenges of the industry and business world each department of the college has initiated some Value Added Courses. The major goal of theses courses is to fill the gap between the industry ready engineers and the 'professionals in training'. In this context we always enforce to train engineers with the current norms of industry.

The value addition course on Automation has been initiated for students with electrical and electronics background. Similarly, students of computer engineering background are trained on on JAVA, dot net etc. The students of Mechanical Engineering have been trained on advance machining skill required for automobile industries. The college give emphasis on Personaility Development Program so that the students can acquire good communication skill required for professional development in engineering career.

**4. The Practice:** The College has realized vital need for improving employability of students through value added courses. By providing industry relevant training and skills, efforts have been made to improve the employability of students. Some of the efforts made in this direction are briefly described here.

**Co-curricular Industry Relevant Programs:** Understanding the requirement to bridge the gap between industry and academic curriculum, the college has started many curricular training programmes such as Rockwell, Microsoft academy. Net programme.

Manufacturing Process & Skill development: : This is in house student training program running in association with Indian Institute of Skill Development (IISD) Private Limited, Gurgaon (Training partner of National Skill Development Corporation, Government of India) for certification programme to enhance the job opportunity in manufacturing and automobile sector.

**CAD Training Program:** This is an on campus student training program in connection with LeLogix Design Solution Private Limited, Greater Noida to provide software training programme in engineering design and analysis to Mechanical Engineering students.

**PLC/SCADA Training Programme:** This is an on campus student training program running in collaboration with Rockwell Automation. The idea is to make understand the way an industry operates through training/ project on actual industrial equipment and through interaction with experts from industry who will not only impart training but will also put their vast experience on the table for the students absorb and gain some insights before taking the plunge.

Web Development using ASP.Net with C#: This is a Microsoft IT Academy Certification programme which consists of two levels, basics of C# in level one and ASP.Net at level two. Technical Sessions: Technical Sessions are organized by all the departments to enhance the reasoning and technical, aptitude of students. It also includes mock interviews, online tests, group discussion, debates etc. This helps students to be successful at various competitive exams such as, GATE, PSUs etc.

**Personality Development Program:** Communication and other soft skills are an integral part of holistic education required for all round development of students. Soft skills also play an important role in improving the employability of students. In consideration of these factors, the college has introduced well structured Personality Development Programme comprising of 12 modules. This course has been assigned regular classes and attendance for these classes is mandatory for all the students.

**5. Evidence of Success**: The outcome of these courses is highly rewarding which is visible in the improved confidence level of students. These programmes provide students hands on experience of industry proceedings and workings. These programmes have been paying well in terms of a getting good placements and better pay packages. The students are getting admission in foreign universities. These drives have also opened new avenues of higher education for our students. A lot of students have got selected GATE, PSUs.

#### 6. Problems Encountered & Resources Required:

These value Aided courses are offered at very high fee by the industry and it is not possible for all the students to pay the hefty fee. The college has invited these companies on goodwill mission and industry has also extended its helping hands towards the college to educate the students.

The big problem that arises is of scheduling these training programmes with regular academic of the college. Therefore, the college utilized weekends to arrange these programmes successfully.

#### **BEST PRACTICE (C):**

**1. Title of the Practice:** Engineering Instructional Development: Programs, best practices and recommendations

#### 2. Goal

The basic aim of the 'best practices' adopted by our institute is to improve the quality of learning experience of the students through the use of well defined pedagogical techniques. It incorporates several dimensions such as the effective implementation of curriculum and course content, a variety of learning contexts (including project-based learning, collaborative learning, experimentation, etc.), soliciting and using feedback, and effective assessment of learning outcomes. It also aims at establishing well-adapted learning environments and student support services.

The practices or concepts which have been implemented are an integration of different interrelated principles which are necessary for the holistic development of the student. The cognitive and developmental aspects of the teaching and learning have been combined with the social and interpersonal skills of the teaching so that students can develop true understanding of concepts through higher-order thinking associated with various fields of inquiry and through self-monitoring of their thinking. The interpersonal approach is emphasized to promote the cooperative learning among the students.

#### 3. The Context

The wide difference in the student profile and the lack of English language proficiency among the students were the most challenging issues while designing the approaches for 'best practices'. Furthermore, the inability of the students to correlate their theoretical knowledge with the practical aspects, non-ability to correlate the mathematical concepts with their subject knowledge and the lack of self-learning attitude are also some of the prominent hurdles in defining the best teaching practices. The designing of teaching methodology to

make our students more useful and relevant for industry further increases the complexity of the process.

#### 4. The Practice

- Continuous upgrading in pedagogy, use of technologies, assessment models aligned with student-centered learning.
- Providing student specific guidance and tutoring related to their subjects.
- Assessing impacts and documenting effectiveness of the teaching delivered through a constructive and timely feedback method.
- Fostering capacity building among the academic staff through a range of various programs such as conferences with experts, workshops on practical applications and case studies.
- Teaching excellence awards for faculty members to recognizes the individual talent
- Building research capacity in the institute by promoting the faculty members to receive research grant from government funding agencies.
- Motivating the faculty members for industry specific consultancy work.

#### 5. Evidence of Success

The marks obtained by students in the university exam shows a good improvement after the implementation of best practices. The average marks obtained by students in the university examination have been increases. The result of some subjects which were considered to be tough from student's point of view has also been increased from the previous year. Students have volunteered to establish a project lab where they can convert their ideas and concepts into some feasible design or product. Students have won prizes for their innovative ideas in several technical fest which show their willingness to present a feasible solution and accept the challenges given by others. The faculty members have also shown a very good response after the implementation of 'best practices' in the form of research activities. Most of the faculty members are now pursuing their doctorate programme with good number of publications in reputed journals and conferences.

#### 6. Problems Encountered and Resources Required

The main problems encountered were the student diversity and wide gap in their intellectual level due to which a uniform style cannot be effectively implemented. Motivating such students for team-based learning is very difficult and inductive methods of learning are not very effective therefore our institute has implemented the policy of making it mandatory for

those students to attend the weekend classes so that personalized attention can be given to those specific students. We are using information and communication technology very widely so that effective dissemination of knowledge can take place among the students. Another problem is to identify the broad range of challenges which a faculty may face during the course of their career. We are encouraging the faculty members to attend faculty development programme so that they can acquire the different skill set according to their identified career stage.

#### 8. Contact details

Name of the Principal: **Dr. Vineet Kansal** 

Name of the Institution: I.T.S Engineering College

City: Greater Noida

Pin Code: **201308** 

Accredited Status: Not Accredited

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Mobile: **9711994485** 

# **PART-D**

# **Evaluative Report of the Departments**

## 3. Evaluative Report of the Departments

1. **Name of the department:** Applied Science and Humanities

2. Year of establishment: 2006

3. Name of Programmes / Courses offered: B.Tech / UG

4. Name of the Interdisciplinary courses and the department /units involved

Sl.	Interdisciplinary Courses	Year	Department/ Units
No.			involved
1	Engineering Mechanics	1 <sup>st</sup>	ME Department
2	Engineering Mechanics Lab	1 <sup>st</sup>	ME Department
3	Manufacturing Science	1 <sup>st</sup>	ME Department
4	Engineering Graphics	1 <sup>st</sup>	ME Department
5	Workshop Practices	1 <sup>st</sup>	ME Department
6	Electronics Engineering	1 <sup>st</sup>	ECE Department
7	Electronics Engineering Lab	1 <sup>st</sup>	ECE Department
8	Electrical Engineering	1 <sup>st</sup>	EEE Department
9	Electrical Engineering Lab	1 <sup>st</sup>	EEE Department
10	Computer Programming	1 <sup>st</sup>	CSE Department
11	Computer Programming Lab	1 <sup>st</sup>	CSE Department
12	Geo Sciences	1 <sup>st</sup>	CE Department

- 5. **Annual/semester/choice based credit system (programme wise)** Semester based credit system
- 6. Participation of the department in the courses offered by other department

Sl.	Name of course	Year	Name of the Department
No.			
1	Mathematics III	2 <sup>nd</sup>	All Engineering Departments
2	Basic Simulation & Modeling	2 <sup>nd</sup>	All Engineering Departments
3	Human Values and Professional Ethics	2 <sup>nd</sup>	All Engineering Departments
4	Industrial Psychology	2 <sup>nd</sup>	All Engineering Departments
5	Industrial Sociology	2 <sup>nd</sup>	All Engineering Departments
6	Engineering and Managerial Economics	3 <sup>rd</sup>	All Engineering Departments
7	Industrial Management	3 <sup>rd</sup>	All Engineering Departments

- 7. Courses in collaboration with other universities, industries, foreign institutions etc.: NA
- 8. Details of courses/programs discontinued (if any) with reasons **NIL**

## 9. Number of Teaching posts

	Sanctioned	Filled
Professors	5	5
Associate Professors	11	1
Assistant Professors	32	19

# 10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. M.Phil. etc.,)

Name	Qualification	Designation	Specialization	Experience	No. of Ph.D. Students guided for the last 4 years
Dr. Rakesh Dube	M.Sc.,Ph.D.	Prof. & Head	Fluid Mechanics & Heat Transfer	18	Nil
Dr. P. K. Shukla	M.Sc.,Ph.D.	Prof.	Materials Science	18	Nil
Dr. Rashmi Gupta	M.A.,Ph.D.	Prof.	English Literature	9	Nil
Dr. O. P. Chaudhary	M.Sc.,Ph.D.	Prof.	Differentiable Manifold	16	Nil
Dr. Sanjay Kumar Mishra	M.Sc.,Ph.D.	Prof.	Molecular Spectroscopy	13	Nil
Dr. Deepa Singh	M.Sc.,Ph.D.	Associate Prof	Physical Chemistry	22	Nil
Dr. Jaya Tripathi Mishra	M.A.,Ph.D.	Assistant Prof.	English Literature	6	Nil
Dr. Ruchi Srivastava	M.Sc.,Ph.D	Assistant Prof.	Inorganic Chemistry	8	Nil
Dr. Arunesh Kumar Yadav	M.Sc.,Ph.D	Assistant Prof.	Equations of State ( Condensed Matter Physics)	13	Nil
Dr. Sudha Singh	M.Sc.,Ph.D	Assistant Prof.			Nil
Dr. Anupam Kumar Singh	M.Sc.,Ph.D	Assistant Prof.	Pure Mathematics	1	Nil
Dr. Anjali Gupta	M.Sc.,Ph.D	Assistant Prof.	EVS and Chemistry	4	Nil

Dr. Divya Tripathy	M.Sc.,Ph.D	Assistant Prof.	Applied and synthetic organic chemistry	1	Nil
Mr. Anil Kumar Singh	M.Sc.,	Assistant Prof.	Applied Mathematics	19	Nil
Mr. Rakesh Kumar Garg	M.Com,	Assistant Prof.	Commerce	10	Nil
Mr. Surinder Singh	M.Sc.,M.Phil	Assistant Prof.	Space Science	7	Nil
Ms. Anemone Koul Chaku	M.Sc.,M.Phil	Assistant Prof.	Materials Science	8	Nil
Ms. Bhanumati Panda	M.Sc.,M.Phil	Assistant Prof.	Applied Mathematics	13	Nil
Ms. Rakhi Sharma	M.A.,M.Phil	Assistant Professor	English Literature	6	Nil
Ms. Shalini Kumari	B.Tech, M.Tech	Assistant Prof.	Bio Sciences	3	Nil
Mr. Saroj Kumar Dhal	M.A., M.Phil	Assistant Professor	Human Psychology	6	Nil
Ms. Renu Chaudhary	M.Sc.,M.Phil	Assistant Prof.	Applied Mathematics	9	Nil
Ms. Arti Dua	M.Sc.,M.Phil	Assistant Prof.	Fluid Mechanics	8	Nil
Ms. Kavita Sinha	M.Sc.,M.Phil	Assistant Prof.	Applied Mathematics	6	Nil
Ms. Priyanka Rani	M.Sc.	Teaching Associate	Applied Mathematics	1	Nil
Mr. Prashant Kumar	M.Sc.	Assistant Prof.	Theoretical Seismology	1	Nil

- 11. List of senior visiting faculty NIL
- 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: NIL
- 13. Student -Teacher Ratio (programme wise)

Total sanctioned	No. of	faculty me	Student ratio	teacher		
strength (S)	Professor	Asso.	Asst.	Total		
		Prof.	Prof.		Existing	As per
						UGC
						norms
720	5	11	32	48	19:1	15:1

# 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled.

Category	Sanctioned	Filled
Academic support staff (technical)	4	4
Administrative staff	NIL	NIL

#### 15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/M.Phil/PG.

Qualification	Numbers
D.Sc.	0
D.Litt	0
Ph.D	13
M.Phil	8
PG	5

- 16. Number of faculty with ongoing projects from:
  - a) National b) International funding agencies and grant received. One
- 17. Departmental project funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: Nil
- 18. Research Center / facility recognized by the University: Nil

#### 19. Publications

#### (a) Publication per faculty

Department	S. No.	Name of Faculty	National Journal	International Journal	Publications in International Database	Books Edited/ Monographs/ Chapter publication with ISBN, ISSN detail	Citation Index	SNIP	SJR	Impact Factor	h-index
AS& H	1	Dr. P.K. Shukla	4	8	-	-	192	12.876	8.433	20.42	
AS& H	2	Mr. Prashant kumar	Nil	4	-	-	4.77	2.177	3.999	4.66	
AS& H	3	Dr. Anupam Kumar SIngh	1	8	-	ISBN 978-3- 642-36039-8	11	-	1.866	0.451	
AS& H	4	Ms. Bhanumati Panda	1	NIL	-	-	-	-	-	-	
AS& H	5	Ms.Renu Chaudhary	Nil	2	-	ISSN 0974- 7273,0975-376	-	-	-	-	
AS& H	6	Dr. Anjali Gupta	Nil	8	-	ISBN 978-3- 659-54589-4	-	7.951	6.091	18.177	
AS& H	7	Dr. Rakesh Dube	5	4	-	ISBN 978-81- 8487-024-4;	-	0.43	0.346	4.393	

AS& H	8	Ms. Arti Dua	-	2	-	978-81-8487- 054-1; 978-81-7319- 663-8; 81-89757-37-7 ISSN: 2249- 0558, 2229 - 7995	-	-	-	-	
AS& H	9	Ms. Kavita Sinha	Nil	1	-	ISSN 0974- 7273, 0975- 3761	-	-	-	-	
AS& H	10	Dr.S.K.Mishra	-	4	-	-	188	5.486	4.346	11.624	
AS& H	11	Dr.A.K.Yadav	3	4	-	-	36	3.839	2.629	5.994	
AS& H	12	Ms. A.K.Chaku	Nil	1	-	ISSN:2319- 6564					
AS& H	13	Dr.Rashmi Gupta	1	10	-	-	-	-	-	10.224	
AS& H	14	Dr.Divya Tripathy	Nil	10		ISBN 0978-3- 8465-4868-4	239	6.67	3.637	12.638	
AS& H	15	Dr. Deepa Singh	7	2	-	-	18	-	-	9.59	
AS& H	16	Dr. Ruchi Srivastava	2	4	-	-	23	5.18	3.466	8.591	

# $20. \ \mbox{Areas of consultancy and income generated: } NIL$

# 21. Faculty as members in

S.No	Name of Faculty	National Committees	International	Editorial
			Committees	Board
1	Dr. Rakesh Dube	a)Indian Physics	International	a)International
		Association,	Association of	Journal of
		b)Intellectuals Society for	Engineers	Scientific
		socio-techno welfare,,		Research
				Engineering
				& Technology
2.	Dr. P. K. Shukla	a) Indian Association of	-	-
		Physics Teachers		
		b) Indian Physics		
		Association		
		c) Indian Solid State Ionics		
		Society		
3.	Dr. Sanjay Kumar	1. Indian Physics	-	-
	Mishra	Association (IPA)		
		2. Laser and Spectroscopy		
		Society of India (LASSI)		
4.	Dr. Anupam	Society of Applied	1. International	-
	Kumar Singh	Mathematics (SAM)	Rough Set Society	
			(IRSS)	
			2. International	
			Association of	
			Computer Science	

			and Information Technology' (IACSIT), 3. International Association of	
			Engineers' (IAENG),	
5.	Bhanumati Panda		ISTE	
6.	Dr. Diya Tripathy	Indian Oil Chemists' Society	-	-
7.	Saroj Kumar Dhal	Indian Sociological Society	International Sociological Association	-
8.	Rakhi Sharma	English Language Teacher's Association India (ELTAI)	-	-

#### 22. Students projects: NA

- a) Percentage of students who have done in-house projects including inter departmental /programme.
- b) Percentage of students placed for projects in organization outside the institution i.e. in Research laboratories/Industry/other agencies.
- 23. Awards/Recognitions received by faculty and students

NIL

- 24. List of eminent academicians and scientists / visitors to the department: NIL
- 25. Seminars/Conferences/Workshops organized and the source of funding

#### a) National

S.No.	Academic year	Name of the	Source of funding
		Seminar/conference/Workshop	
1	2010-11	National Workshop on Solar	MNRE (Rs. 1,00,000/)
		Photovoltaic Components	Bergen Associates, New Delhi (Rs.
		Systems & Designs	1,00,000/-)

#### b) International NIL

- 26. **Students profile programme/course wise:** Shown in the evaluative report of each Department.
- 27. **Diversity of Students**: Shown in the evaluative report of each Department .

- 28. How many students have cleared national and state competitive examination such as NET, SLET, GATE, Civil services, Defense services etc.?: NA
- 29. Student progression: NA
- 30. Details of infrastructure facilities

#### a) Library

Number of Books	150
Proceedings of conference	Nil
Journals	4
CDs	Nil

#### b) Internet facilities for Staff and Students

AS&H Department has a dedicated Language Lab (with 31 computers) and three Computer Programming Labs (each with 60 computers). All the computers are connected with internet facility for students. All the staff rooms are equipped with individual internet facilities.

#### c) Class rooms with ICT facility

All the class rooms have the provision of internet facility and LCD projector. LCD projector has been installed in one class room and movable LCD projector is used when there is a specific requirement.

#### d) Laboratories

S.No.	Name of the Laboratory/ Workshop
1	Engineering Physics Lab
2	Engineering Chemistry Lab
3	Language Lab

- 31. Number of students receiving financial assistance from college, university, government or other agencies.

  NIL
- 32. Details on students enrichment programmes (special lectures/workshops/seminar) with external experts.

#### 33. Teaching methods adopted to improve student learning

- For the subject like Engineering Graphics the concepts are explained with solid models.
- Using PPTs, showing videos, case studies, visit to industries to show the subject related engineering problems.

- Tutorial classes are conducted for enhanced learning.
- Doubt clearing session for weaker students by individual faculty member.
- Subject wise lecture notes are provided by the faculty member.
- Students are encourage to use NPTEL resources for various subjects

#### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Raising awareness and promoting the adoption of **habits and behaviour** by students, faculty, staff, in line with a more sustainable vision of the organization.
- An improvement in the **operation** of services, equipment and facilities in order to achieve a more rational use of the available resources.
- The promotion and improvement of **transparency and accountability** within the organization.
- Measurement of water, paper and electricity consumption.
- Improvement in recycling operations: installation of containers for separating and collecting paper, plastics, glass, electronic waste, batteries, ink/toner cartridges, etc.

#### 35. SWOC analysis of the department and Future plans

#### **Strengths:**

- Qualified and dedicated Faculty from wide range of specialization and subjects.
- Result oriented teaching.
- Excellent Infrastructure and Lab facilities.
- Collaborative effort of faculty members and technical staff members.
- Prompt to ensure the academic excellence of the students by arranging lecture notes and solution to tutorial problems.

#### Weakness:

- Lack of Inter-disciplinary interactions.
- Lack of Research and Development facilities.
- Lack of Inter-disciplinary projects.
- Lack of support for International Collaboration.

#### **Opportunities:**

- Student participation in club activities, inter college competitions etc.
- Innovation in teaching learning process.
- Increase of high quality research publications.

#### **Challenges:**

- Students with diverse background.
- Constant changes to technology.
- Adapting to changing student expectations.
- Patenting the innovative research work carried out in the department.
- Balancing administrative, academic and research work.

#### Future plans of the department.

#### **Educational Plan**

- To establish industry / academic interactions or collaborations with Regional /state level/ national / international organizations
- Provide better opportunities for our faculty and students to engage in Professional consultancy services to the government as well as multinational sectors.
- To encourage the students to become entrepreneurs.

#### Research plans

- Strengthening of linkages with DST, AICTE, CSIR, BRNS, UGC etc. for financial and non-financial support.
- To have research tie-ups with national and international reputed institutions.
- To link the basic science with engineering so that new avenues for research can be explored.
- To contribute more effort towards relevant research project for the benefit of the society.

## 3. Evaluative Report of the Departments

1. Name of the Department : Computer Science & Engineering

2. Year of establishment : 2006

**3.** Name of the course : Bachelor of Technology (B.Tech.)

Master of Technology (M.Tech.)

#### 4. Interdisciplinary courses and departments involved:

Sl. No.	Interdisciplinary Courses	Year	Department/ Units involved
1.	Mathematics I (AS 101)	1 <sup>st</sup>	Applied Science and Humanities (ASH)
2.	Mathematics II (AS 201)	1 <sup>st</sup>	ASH
3.	Mathematics III (EAS 301)		ASH
4	Human Values and Professional Ethics (EHU 111)	1 <sup>st</sup>	ASH
5	Engineering Physics I (AS 102)	1 <sup>st</sup>	ASH
6	Engineering Physics II (AS 202)	1 <sup>st</sup>	ASH
8	Electrical Engineering (EE 101/ EE 201)	1 <sup>st</sup>	Electrical and Electronics Engineering
9	Electronics Engineering(EC 101/ EC 201)	1 <sup>st</sup>	Electronics and Communication Engineering
10	Engineering Chemistry (AS 103/AS 203)	1 <sup>st</sup>	ASH
11	Professional communication (AS 105)	1 <sup>st</sup>	ASH
12	Industrial Psychology (EHU 301)	2 <sup>nd</sup>	ASH
13	Industrial Sociology (EHU 402)	2 <sup>nd</sup>	ASH
14	Engineering and Managerial Economics (EHU 501)	3 <sup>rd</sup>	ASH
15	Industrial Management (EHU 601)	3 <sup>rd</sup>	ASH

5. Annual/ semester/choice based credit system (programme wise) : Semester based credit system

## 6. Participation of the department in the courses offered by other Departments:

Sl.	Name of course	Year	Name of the Department
No.			
1.	Computer	1 <sup>st</sup>	Information Technology, Electronics and
	Programming		Communication Engineering, Electrical and
	(CS-101/201)		Electronics Engineering, Mechanical Engineering,
			Civil Engineering
2.	Data Structure	2 <sup>nd</sup>	Electronics and Communication Engineering

- 7. Courses in collaboration with other universities, industries, foreign institutes, etc.: NIL
- 8. Details of courses/programmes discontinued (if any) with reasons: NIL

## 9. No. of Teaching Posts:

Positions	Sanctioned	Filled
Professor	2	1
Associate Professors	4	4
Asst. Professors	18	16

#### 10. Faculty profile:

Name	Qualification	Designation	Specialization	No. of years of experience	No. of PhD. Students guided for the last four years
Dr. Shailesh Tiwari	Ph.D.	Associate Professor & HOD	Software Testing	13	Nil
Dr. Ashish Kumar	Ph.D.	Professor	Reverse Engineering, Adhoc Network	12	Nil
Dr. Gagan Deep Arora	Ph.D.	Associate Professor & Registrar	Design and Analysis of Algorithms	13	Nil
Dr. Manoj Kumar Gupta	Ph.D.	Associate Professor	Bioinformatics, Computational Biology, Algorithms	12	Nil
Mr. Ankur Saxena	M.Tech.Ph.D.*	Associate Professor	Digital Image Processing	15	Nil
Mr. Tarun Kumar Chugh	M.Tech.	Assistant Professor	Cryptography & network security	15	Nil

Mr. Devesh	M.Tech.,	Assistant	Autonomic Computing,	13	Nil	
Garg	Ph.D.*	Professor	Testing, Algorithm	13	1411	
Mr. Abhishek	M.Tech.,	Assistant	Software Engineering	12	Nil	
Shivhare	Ph.D.*	Professor	Web mining	12	INII	
Mr. Vijay	M.Tech.,	Assistant	Data Structures,	11	Nil	
Shukla	Ph.D.*	Professor	Software Engineering	11	INII	
Ms. Pritee	M.Tech.,	Assistant	Image Processing and	11	Nil	
Gupta	Ph.D.*	Professor	Neural Network	11	INII	
Mr. Sandeep	M.Tech.,	Assistant	Fractal Patterns & Data	9	Nil	
Kumar	Ph.D.*	Professor	Mining	9	INII	
Mr. K. P.	M.Tech.	Assistant	Image processing,	9	NE1	
Singh	M. I ech.	Professor	Evolutionary algo.	9	Nil	
Ms. Deepti	M.Tech.	Assistant	Data Mining	9	Nil	
Mishra	M. I ech.	Professor	Data Mining	9	INII	
Mr. Abhishek Singh Verma	M.Tech.	Assistant Professor	Assistant Audio Watermarking,		Nil	
Mr. Rakesh	M.Tech.	Assistant	Object Relational	8	Nil	
Kumar Rai	M. I ecii.	Professor	Mapping, SOAP	o	INII	
Mr. Arun	M.Tech.	Assistant	Soft Computing	7	Nil	
Kumar Rai	MI. I ECII.	Professor	Soft Computing	,	1111	
Mr. Yogesh	M.Tech.	Assistant	Compiler Design &	5	Nil	
Sharma	M. I ecii.	Professor	Computational Theory	3	INII	
Mr. Dushyant	M.Tech.	Assistant	Cloud Computing	5	Nil	
Singh	M. I ecii.	Professor	Cloud Computing	3	INII	
Mr. Vivek	M.Tech.	Assistant	Image Watermarking,	5	Nil	
Tomar	M. I ecii.	Professor	Software Engineering	3	INII	
Ms. Shweta		Assistant	3-D Secure Protocol in			
Rathour	M.Tech.	Professor	Networking using	3	Nil	
Kauloul		Fiolessoi	Biometric concepts			
			Analysis of Genetic			
Ms. Bhawna	M.Tech.	Teaching	Algo. for	0.5	Nil	
Gupta	MI. I ecii.	Associate	multiprocessor task	0.5	INII	
			scheduling			

<sup>\*</sup>Pursuing Ph.D.

# 11. List of senior visiting faculty.

NIL

12. Percentage of classes taken by temporary faculty- programme-wise information.

NIL

**13. Programme-wise Student Teacher Ratio**: For UG Course -15: 1

For PG Course -12:1

# 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Category	Sanctioned	Filled
Academic support staff (technical)	8	8
Administrative staff	NIL	NIL

#### 15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/M.Phil/PG.

Qualification	Numbers
D.Sc.	0
D.Litt	0
Ph.D	4
M.Phil	0
PG	17

16. Number of faculty with ongoing projects from: a) National b) International funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise

NIL

17. Departmental projects funded by DST-FIST; DBT, ICSSR, etc. and total grants received.
NIL

**18. Research facility / centre with University:** NIL

## 19. Publications:

					S		7					
Name	Publications	Peer reviewed journals	Listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN /ISSN	Citation Index	SNIP	SIR	Impact Factor	h-index
Dr. Shailesh Tiwari	27	08	26	Nil	1	1	1	25	Nil	Nil	1.1	3
Dr. Ashish Kumar	14	-	-	-	-	-	-	-	-	-	-	-
Dr. Gagan Deep Arora	10	-	-	-	-	-	-	-	-	-	-	-
Dr. Manoj Kumar Gupta	13	03	07	0	01	0	-	10	-	-	1.5	-
Mr. Ankur Saxena	5	-	-	-	-	-	-	-	-	-	-	-
Mr. Tarun Kumar Chugh	2	-	-	-	1	1	-	-	-	-	-	-
Mr. Devesh Garg	4	-	-	-	-	-	-	-	-	-	-	-
Mr. Abhishek Shivhare	2	-	-	-	-	-	-	-	-	-	-	-
Mr. Vijay Shukla	2	-	-	-	-	-	-	-	-	-	-	-
Ms. Pritee Gupta	14	-	-	-	-	-	-	-	-	-	-	-
Mr. Sandeep Kumar	2	-	-	-	-	-	-	-	-	-	-	-
Mr. K. P. Singh	7	-	-	-	-	-	-	-	-	-	-	-
Ms. Deepti Mishra	3	-	-	-	-	-	-	-	-	-	-	-
Mr. Abhishek Singh Verma	5	-	-	-	-	-	-	-	-	-	-	-
Mr. Rakesh Kumar Rai	1	-	-	-	-	-	-	-	-	-	-	-
Mr. Arun Kumar Rai	1	-	-	-	1	-	-	-	-	1	-	-
Mr. Yogesh Sharma	1	-	-	-	-	-	-	-	-	-	-	-
Mr. Dushyant Singh	1	-	-	-	-	-	-	-	-	-	-	-
Mr. Vivek Tomar	6	-	2	-	-	-	-	-	-	-	-	-
Ms. Shweta Rathour	4	-	-	-	-	1	-	ı	-	-	-	-
Ms. Bhawna Gupta	2	-	-	-	-	-	-	-	-	-	-	-

#### 20. Areas of consultancy and income generated:

Areas of consultancy	Income generated
Consultancy given to ITS Dental College,	Nil
Muradnagar and Greater Noida on Web	Nil
Applications.	

#### 21. Faculty as members in

(a) National Committees : 01(b) International Committees : 08(c) Editorial Boards : 01

#### 22. Student projects

a) percentage of students who have done in-house projects including interdepartmental: 100%

b) percentage of students doing projects in collaboration with industries / institutes : 5%

#### 23. Awards / recognitions received by faculty and students

#### 24. List of eminent academicians and scientists/visitors to the department:

	Date of	Type of		Resource Person's		
S.No.	Event	Event	Topic	Name	Desigation	Organization
1	19.04.2013	Guest Lecture	Information Security & Cyber Laws	Mr. Pavan Duggal	Senior Advocate	Supreme Court of India
2	07.08.2013	Guest Lecture	Data Structure & Computer Algorithms	Dr. Sartaj Sahni	Professor	University of Florida, USE
3	08.08.2013	Guest Lecture	A Secure data sharing & query processing framework via federation of Cloud Computing	Prof. Sanjay Madria	Site Director & Professor	Missouri University of Science & Technology, Missouri, USA
4	13.08.2013	Guest Lecture	Entrepreneurship & Startup for IT Graduates	Dr. Amit Mittal & Mr. Vipul Jain	Co- Founders	Gabbit Systems
5	26.08.2013	Guest Lecture	Mathematics: A Critical Thinking	Ambassador Krishna Shetty	Diplomat Mentor	Indian Council Of World Affairs, New Delhi
6	17.12.2013	Guest Lecture	Faculty Workshop on Machine Learning &	David Barber	Professor	Computer Science Deptt., University

			Bayesian Reasoning			College, London
7	20.12.2013	Guest Lecture	How to do good research in Computer Science	Alexander Gelbukh	Professor	National Polytechnic Institute, Mexico

#### 25. Seminars/Conferences/Workshops organized & the source of funding

(a) National Conference: 01 COMMUNE Conference on Advancements in Communication & Computing Systems" (COMMUNE CACCS 2012) on March 24-25 2012 was sponsored by AICTE by the amount of Rs. 1, 00,000 (One Lac).

**(b) International** : Nil

#### 26. Student profile programme/course wise:

Name of the	Applications	Selected	Enr	Enrolled Pass		
Course/programme B.Tech-CSE	received	Sciected	*M	*F	percentage	
2009-13	156	120	96	24	77.19	
2008-12	147	116	99	17	86.73	
2007-11	96	59	44	15	90	

\*M = Male \*F = Female

#### 27. Diversity of Students

Name of the Course B.Tech-CSE	% of students from the same state	% of students from other States	% of students from abroad
2013-14	45%	55%	0%
2012-13	84%	16%	0%
2011-12	42%	58%	0%

28. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations: 02

#### 29. Student progression

Student progression	Percentage against enrolled
UG to PG	10% (Approx)
PG to M. Phil.	NIL
	NIL
PG to Ph.D.	

	NIL
Ph.D. to Post-Doctoral	
Employed	
a. Campus selection	40%
b. Other than campus recruitment	40%
Entrepreneurs	NIL

#### 30. Details of infrastructural facilities

#### a. Library

Number of Books	200
Proceedings of conference	Nil
Journals	16
CDs	Nil

- **b. Internet facilities for staff and students:** Two Lease line (i) 10 Mbps on RF Link through Aircel. (ii) 5 Mbps on fiber optics through BSNL.
- **c.** Class rooms with ICT facility: Out of total 6 Class Rooms, 2 Rooms are with fixed LCD while in 4 rooms LCD is used on demand.
- **d. Laboratories:** Total 7 laboratories such that 6 Labs are having 60 computer systems while 1 Lab is dedicated for Research activity.

Research laboratories: 1 Computer Lab is for the Research activity

# 31. No. of students getting financial assistance from College, university, government or other agencies.

Category	2013-14	2012-13	2011-12	2010-11
General	33	59	64	72
OBC	37	45	68	66
Minority	8	8	4	
SC	1	8	22	22
Special Scholarship Scheme for J & K	1	O O	22	22
Students	1			

# **32.** Details of student enrichment programmes (special lectures/workshops/seminars) with external expert.

1. Personality Development Programme are conducted every year.

- 2. Workshop on TGMC(The Great Mind Challenge), IBM
- 3. Inviting guest speakers.
- 4. Invited talk
- 5. Technical writing.
- 6. Technical sessions.

# 33. List the teaching methods adopted by the faculty for different programmes.

- 1. White Boards and Markers
- 2. PPT using LCD projector
- 3. Case studies, practical implementation, prototype building
- 4. Group Discussion Method
- 5. Co-operative Learning
- 6. E-Learning

#### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities.

I.T.S Engineering College recognizes its responsibility towards the society, and plans for an ever-lasting effective Corporate Social Responsibility (CSR) that shall foster growth amongst the neglected sectors of our society. We believe that Education sector plays a vital role in nourishing the roots of development, that foster growth to the nation. Our social investment strategy is based on our vision to uplift the poor section and improving people's lives and realizing the essence of Human touch through our corporate culture.

#### **Objectives**

- To enhance value creation in the society and in the community in which we operate, through our services, conduct & initiatives, so as to promote sustained growth for the society and community, in fulfillment of our role as a Socially Responsible Corporate.
- To directly or indirectly take up programmes that benefit the communities in & around the areas of our presence, and thus over a period of time, in enhancing the quality of life & economic well-being of the local populace.
- To promote and activate the vision of young minds and talents through different activities for the needy and destitute.
- 35. Strengths Weaknesses Opportunities Challenges (SWOC) analysis of the department and Future plans.

#### **Strengths**:

Value Added Courses like .NET, Java, C and C++., PDP Classes, Placement preparation which includes GD and Aptitude test for the students of Final Year before going for placements.

#### Weakness:

Limitation to conduct extension programmes.

Low number of students getting qualified in national level exams.

#### **Opportunities**:

To conduct cross-faculty courses

Promotion of interdisciplinary research activities

Preparing the students for participating in extracurricular activities at outside of the state.

#### **Challenges:**

To provide conducive environment to students to fit for the organization in all the aspects.

To invite top Multinational companies for Campus Recruitment.

To acquire consultancy from outside agency for the existing specialization.

#### **Future plans of the Department:**

- a. To organize State and National Level Seminars sponsored by UGC.
- b. To organize National Level Competitions for the college.
- c. More guest lectures and workshops are to be organized from industry experts.
- d. Giving students experience of small research projects and papers.

#### **ANNEXURE**

#### **List of Publications**

## **Publication in Journals**

S. No	Title of paper	Author(s) Names	Name of the Journal	Vol. & Year	Page No.	ISSN
1	Regression Testing: A Spectrum-based Approach	Shailesh Tiwari, K K Mishra A K Misra	International Journal of Computer Applications (IJCA)	55(18) 2012	35-42	
2	Improved Environmental Adaption Method for Solving Optimization Problems	Shailesh Tiwari K K Mishra A K Misra	Communications in Computer and Information Science,.	2012	300-313, Springer	
3	Efficient Path Selection Strategy Based on Static Analysis for Regression Testing in	MK Debbarma Shailesh Tiwari AK Misra	International Journal of Computer Theory and Engineering (IJCTE)	5(2), 2013.	248-252	
4	An Approach to Filter the Test Data for Killing Multiple Mutants in Different Locations",	Nagendra Pratap Singh, Rishi Mishra, Shailesh Tiwari A. K. Misra,	International Journal of Computer Theory and Engineering (IJCTE)	5(2) 2013	253-257	
5.	Physics-Inspired Optimization Algorithms: A Survey	Anupam Biswas, K. K. Mishra, Shailesh Tiwari, and A. K. Misra,	Journal of Optimization,	2013		
6.	A Novel Genetic algorithm for Generating Prime Numbers	Shailesh Tiwari, K.K. Mishra, Prince Bhatia A.K. Misra,	Journal of Algorithms and Optimization (JAO)			
7.	Tuning of Cost Drivers by Significance Occurrences and their Calibration with Novel Software Effort Estimation Method Advances in Software Engineering,	Brajesh Kumar Singh, Shailesh Tiwari, K. K. Mishra A.K. Misra	Hindawi Publishing Corporation, USA.			
9.	Improved Environmental Adaption Method and its Application in Test Case Generation",	Shailesh Tiwari, K.K. Mishra, A.K. Misra	Journal of Intelligent and Fuzzy Systems			
10.	Computer and electronics in agriculture:automatic monitoring system for field information	Kshatrapal Singh, Ponam Tanwar	Lingaya's journal of professional studies,	2 ( 1) 2008		
11	A Review on Clustering Based Methods and Usage for Pattern Recognition"	Deepti Mishra	International journal of research and development	2014		
12	Analysis of Genetic Algorithm for Multiprocessors Task Scheduling Problem,	Bhawna Gupta and Sunita Dhingra	International Journal of Advanced Research in Computer Science and Software Engineering	3(7) 2013		

			(IJARCSSE)			
13	Implementation of Dynamic Threshold Method for Human Motion Detection in Video Surveillance Application " has been published in,	Pritee Gupta <sup>1</sup> , Dr. Yashpal Singh <sup>2</sup>	International Journal Of Computers And Technology, U.S.A	13(8), 2014	4776-4781	
14	A Comparative Approach of Human Motion Detection Methods in video Surveillance Application –A Review	Pritee Gupta Yashpal Singh	International Journal of Advanced Research in Computer Science	4( 11) 2013		
15	Network Designing based on OSPF & EIGRP Routing Protocol & Their Comparison Using Network Simulator	Shweta Rathour	International Journal Of computer Science and Technology (IJCST)	4 ( 4), 2013		
16	Signcryption based on elliptic curve cryptosystems	Shweta Rathour	International Journal of Innovations and Advancement in Computer Science	3(2)		2347 – 8616
17	Mining Web using Hyper Induced Topic search Algorithm	Shweta Rathour	International Journal of Science and Research	3 (7) 2014		2319- 7064
18	Prioritizing the Test cases of Web Services By APFD Metric Algorithm	Shweta Rathour	International Journal of Science and Research	3 ( 7) 2014.		
19	Conception & Implementation of a Novel Digital Image Watermarking Algorithm using Cascading of DCT and LWT	V.Tomar, A.Kumar, A.Choudhary	IEEE Xplore.			
20	A Statistical Comparison of Digital Image Watermarking Techniques	V.Tomar, D.Mehrotra A.Choudhary	Special Issue of International Journal of Computer Applications	Sep 2012.	0975- 8887	
21	Mining databases on World Wide Web	M.Gupta V.Tomar J.Verma S.Roy	International Journal of Computer Science	8(3), 2011.		
27	Ultra Wideband Seven Poles Lowpass Filter Using DGS Array	Rashid Mahmood Pramod Kumar Neelam Srivastava Anil Kumar	International Journal of Computer Science and Technology (IJCST).	1(1) 2010		

## **Publication in Conferences**

S. No	Title of paper	Author(s) Names	Name of the Conference	Venue	Year
1.	A variant of NSGA for solving Multi objective optimization problems	Shailesh Tiwari, K.K. Mishra, and Akash Punhani	GEM 2009 WORLDCOMP	Las Vegas, U.S.A	2009
2	Congestion control in ATM Networks Using Fuzzy Traffic Controller	Shailesh Tiwari Vivek Kumar Sudeept Yadav	AIA 2009	RBS College, Agra.	Sep 12-13 September 2009.
3	Path Selection Strategy for Regression Testing	Shailesh Tiwari K.K.Mishra Anoj Kumar A.K.Misra	SERP2010 WORLDCOMP 2010	Las Vegas, U.S.A	July 12-15, 2010
4	Generation of efficient Test Data using path Selection strategy with Elitist Genetic algorithm in Regression Testing	Shailesh Tiwari K. K. Mishra Anoj Kumar A.K. Misra	3 <sup>rd</sup> IEEE ICCSIT 2010,	Chengdu, China	July 9-11, 2010.
5	An Approach for Mutation testing Using Elitist genetic algorithm	Shailesh Tiwari, K. K. Mishra, Anoj Kumar, and A.K. Misra	3 <sup>rd</sup> IEEE ICCSIT 2010	Chengdu, China	July 9-11, 2010.
6	Change Analysis Strategy using Program Spectra in Regression Testing	Shailesh Tiwari, K.K.Mishra Anoj Kumar A.K.Misra	International Conference of Intelligent Network & Computing (ICINC- 2010) Proceeding of IEEE	Kulalumpur, Malaysia.	26-28, November, 2010
7	An Integrated Approach for Regression Testing using Program Spectra and Path Selection	Shailesh Tiwari K.K.Mishra Anoj Kumar A.K.Misra	International Conference on Test and Measurement (ICTM- 2010), Proceeding of IEEE	Phuket, Thailand	1-2, December, 2010, at.
8	Spectrum-Based Fault Localization in Regression Testing	Shailesh Tiwari, K.K.Mishra, Anoj Kumar, A.K.Misra,	8 <sup>th</sup> IEEE International Conference on Information Technology:New Generations, ITNG 2011,	Las Vegas, Nevada,USA,	April 11-13, 2011
9	Efficient Path Selection Strategy based on Static Analysis for Regression Testing	Shailesh Tiwari, A.K Misra	4 <sup>th</sup> IEEE International Conference on Computer Sc. and Information Technology (IEEE ICCSIT 2011),	Chengdu, China.	June, 10-12, 2011,
10	A Two Tier Approach for Test Suite Reduction", Proceeding of	Shailesh Tiwari and A.K Misra,	4 <sup>th</sup> IEEE International Conference on Computer Sc. and Information Technology LEGE, GREATER NOIDA	Chengdu, China.	June, 10-12, 2011

			(IEEE ICCSIT 2011)		
11	An Approach To Filter The Test Data For Killing Multiple Mutants In Different Locations	lling A.K Misra, Conference on		Chengdu, China.	June, 10-12, 2011,
12	Implementation of Metamorphic Testing On Spreadsheet Applications	Shailesh Tiwari, A.K Misra	4 <sup>th</sup> IEEE International Conference on Computer Sc. and Information Technology (IEEE ICCSIT 2011)	Chengdu, China	June, 10-12, 2011
13	A bio inspired algorithm for solving optimization problems	Shailesh Tiwari, K.K. Mishra, A.K. Misra,	2 <sup>nd</sup> IEEE International Conference on Computer and Communication Technology (ICCCT 2011)	MNNIT Allahabad	15-17 Sept 2011
14	Improving the Reliability of Communication Network Using Memetic Algorithm	Shailesh Tiwari, Deepak Kumar Singh, K.K. Mishra A.K. Misra	International Conference on Artificial Intelligence (ICAI- 2012), WORLDCOMP 2012,	Las Vegas, USA.	16-19 July 2012
15	A PSO Method with Modified TVAC	Shailesh Tiwari, K K Mishra and A K Misra	International Conference on Advances in Computing and Communication Technologies (ICACCT 2012),	Pattaya, Thailand.	January 19-20, 2013
16	Test Case Generation for Modified Code using a Variant of Particle Swarm Optimization (PSO) Algorithm	Shailesh Tiwari, K K Mishra and A K Misra	10 <sup>th</sup> International Conference on Information Technology: New Generations ITNG 2013	Las Vegas Nevada, USA.	April 15-17, 2013
17	An Approach for Test Case Redundancy Detection in Regression Testin	Shailesh Tiwari, K.K. Mishra, Nitin Singh, A.K. Misra	29th International Technical Conference on Circuits/Systems, Computers and Communications,	Phuket, Thailand	
18	Standardization in Robotics	Kshatrapal Singh Monika Chawla Abdul Rahman	International Conference on Innovative Technologies		18-19 June 2009
19	Sensors Used In Robotics	Kshatrapal Singh Monika Chawla Abdul Rahman	Soft Computing and Artificial Intelligence		15-16 Jan 2009
20	Natural language processing: its applications & tools	Kshatrapal Singh S. Anusha	Artificial Intelligence and Soft Computing		29-30 Aug 2008

21	Remote Sensing & GIS in Sustainable Environment Development	Kshatrapal Singh Anshu Garg Namit Mehrotra	Future trends in Software development		28-Mar-08
22	GIS application in diverse areas	Ranjeet Kaur Monika Chawla Kshatrapal Singh	National seminar on impact of IT on society		9-Feb-08
23	A Review of Blackhole Attack on ADOV Protocol	Abhishek Singh Verma, Ankur Choudhary		ABES Engineering College, Ghaziabad	
24	Study of Audio Watermarking Techniques	Abhishek Singh Verma, Ankur Choudhary, S.P.S Chauhan		ITS Engineering College, Greater Noida	
25	Study and Comparison of different Robust Audio Watermarking Algorithms	Abhishek Singh Verma, Ankur Choudhary, Dr. J.S.Sodhi	Galgotia's College of Engineering & Technology, Greater Noida		
26	A new Approach based on clustering for outlier detection	Deepti Mishra	7 <sup>th</sup> International Conference on Advanced Computing and Communication Technologies (ICACCT <sup>TM</sup> -2013)	Rajampet,Andh ra Pradesh, India	13 November 2014
27	A review on clustering methods in data mining used for pattern recognition"	Deepti Mishra	National conference on "Emerging Trends of Science and Technology (NCETST-13)	Monad University, Hapur	9th Nov-13,
28	Generation of New Inherited Fractal Carpets	Sandeep	CECT-10		9-10 April, 2010
29	Security Management against Attacks in Wireless Sensor Networks	Sandeep	ICSECS-09	Pahang Malaysia.	19-21 October, 2009
30	Artificial Intelligence & Robotics From wireless sensor networks to tangible user interface	Devesh Garg	National conference on Artificial Intelligence & its Application	R.B.S. Engineering College Agra	12-13 <sup>th</sup> Sept 2009
31	Approximation Algorithm in k - anonymity"	Devesh Garg	National conference on Advance Computing & Communication Technology	ABES Engineering College	26-27 <sup>th</sup> Feb 2010
32	A Review of Blachhole Attack in AODV Network	Devesh Garg	National conference on Advance Computing & Communication Technolog	ABES Engineering College	26-27 <sup>th</sup> Feb 2010
33	Audio stenography by using modified LSB Algorithm	Devesh Garg	National conference on Emerging Trends in	Babu Banarasi Das Institute of	26-27 <sup>th</sup> March 2010.

			Network Security	Technology Ghaziabad	
34	A Robust Digital Image Watermarking Technique using Cascading of DCT and DWT	V. Tomar, A.Choudhary D Mehrotra	International Conference of Emerging Trends and Developments in Science, Management and Technology"	RKGIT, Gzb.	March 2013 at
35	Conception & Implementation of a Novel Digital Image Watermarking Algorithm using Cascading of DCT and LWT	V. Tomar, A.Choudhary	International Conference on Reliability, Optimization and Information Technology (ICROIT-2014)	Manav Rachna International University,Fari dabad	6-7 Feb, 2014.
36	A Survey on modern trends in Digital Watermarking" in National Conference on "Role of Information Communication Technology in Knowledge Management" held in Sep 2012 at GCET, Gr. Noida.	V. Tomar, A.Choudhary R Goyal			
37	GUI Layer Based General Purpose Routing Protocol Simulation Architecture	S. Singh, S. Jain, V. Tomar,	National Conference on Role of Information Communication Technology in Knowledge Management held in	GCET, Gr. Noida.	Sep 2012
38	A Concept Paper on complexity & performance trade-offs of SISO turbo decoders.	Yogesh kumar	National Conference on Role of Information Communication Technology in Knowledge Management held in		

## 3. Evaluative Report of the Departments

1. Name of the Department: Electronics & Communication Engineering

2. Year of establishment: 2006

3. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc. D.Litt. etc.)

Sr.No.	Program Level	Name of	Duration
		Programme	
1	Under Graduate	B.Tech in Electronics & Comm Engg.	4 Years
2	Post Graduate	M.Tech in Electronics & Communication Engg.	2 Years

## 4. Names of Interdisciplinary courses and the departments/units involved

Sl.	Interdisciplinary Courses	Year	Department/ Units involved
No.			
1.	Mathematics I (AS 101)	1 <sup>st</sup>	Applied Science and
			Humanities (ASH)
2.	Mathematics II (AS 201)	1 <sup>st</sup>	ASH
3.	Mathematics III (EAS 301)		ASH
4	Human Values and Professional	1 <sup>st</sup>	ASH
	Ethics (EHU 111)		
5	Engineering Physics I (AS 102)	1 <sup>st</sup>	ASH
6	Engineering Physics II (AS 202)	1 <sup>st</sup>	ASH
8	Electrical Engineering (EE 101/	1 <sup>st</sup>	Electrical and Electronics
	EE 201)		Engineering
9	Computer Programming	1 <sup>st</sup>	Computer Science
	(CS-101/201)		Engineering
10	Engineering Chemistry (AS 103/	1 <sup>st</sup>	ASH
	AS 203)		

11	Professional communication (AS 105)	1 <sup>st</sup>	ASH
12	Industrial Psychology (EHU 301)	2 <sup>nd</sup>	ASH
13	Data Structures	2nd	Computer Science Engineering
14	Industrial Sociology (EHU 402)	2 <sup>nd</sup>	ASH
15	Engineering and Managerial Economics (EHU 501)	3 <sup>rd</sup>	ASH
16	Industrial Management (EHU 601)	3 <sup>rd</sup>	ASH

## ${\bf 5.\,Annual/Semester/Trimester/Choice\,Based\,\,Credit\,\,System\,\,(Programme\,\,wise)}$

Programme	Credit System
B.Tech.	Semester wise
M.Tech.	Semester wise

## 6. Participation of the department in the courses offered by other departments

Sl.	Name of course	Year	Name of the Department
No.			
1.	Analog Integrated	3 <sup>rd</sup>	Electrical and Electronics Engineering.
	Electronics (EEC-509)		
2.	Analog and Digital	3 <sup>rd</sup>	Electrical and Electronics Engineering.
	Communication		
	(EEC-609)		
	Wireless Communication		
3	(EEC-028)	4 <sup>th</sup>	Electrical and Electronics Engineering.
3			
	Data Communication	4 <sup>th</sup>	
4.	Network (EEC-809)		Electrical and Electronics Engineering.
4.			
5.	Introduction To	2 <sup>nd</sup>	Computer Science & Engineering.
	Microprocessor (EEC406).		
6.	Analog and Digital	2 <sup>nd</sup>	Electrical and Electronics Engineering.
	Electronics (EEC-409)		

7. Courses in collaboration with other universities, industries, foreign institutions, etc.

NIL

# 8. Details of courses/ programmes discontinued (if any) with reasons NIL.

## 9. Number of teaching posts

Position	Sanctioned	Filled
Professor	2	Nil
Associate Professors	4	3
Asst. Professors	14	15

# 10. Faculty profile with name, qualification, designation, area of specialization (D.Sc./D.Litt./Ph.D./M.Phil. etc.,)

S.No.	Name	Qualificatio	Designation	Specialization	No. of	No. of
		n			years of	Ph.D./
					experience	M.Phil.
						students
						guided
						for
						the last 4
						years
1.	Dr.Lokesh	Ph.D.	Associate	Wireless	14 years	Nil
	Kumar		Professor	Communication		
	Bansal					
2.	Dr. Leena	Ph.D.	Associate	Wireless	11 years	Ph.D.:
	Arya		Professor	Communication		01
3.	Ashish	Ph.D.	Associate	VLSI design	14+ years	M.Tech:
	Gupta	(Pursuing)	Professor			04
4.	Jugal	Ph.D.	Assistant	Microwave	13 years	M.Tech:
	Kishore	(Pursuing)	Professor	Electronics		02
5.	Monika	Ph.D.	Assistant	Electronics &	13 years	Nil
	Bhatnagar	(Pursuing)	Professor	Communication		
6.	Agha Asim	M.Tech.	Assistant	Communication	9+ years	Nil
	Husain		Professor	& Information		
				system		
7.	Amendra	M.Tech.	Assistant	VLSI design	9 years	Nil
	Bhandari		Professor			
8.	Seema	M.Tech.	Assistant	VLSI design	12 years	Nil
	Srivastava		Professor			

9.	Md Rashid	M.Tech.	Assistant	Digtal	11 years	Nil
	Mahmood	Ph.D.	Professor	Communication		
		(Pursuing)				
10.	Navneet	M.Tech.	Assistant	Signal	10 years	Nil
	Choudhary	Ph.D.	Professor	Processing		
		(Pursuing)				
11.	Prabhakar	M.Tech.	Assistant	Wireless	8 years	Nil
	Sharma		Professor	Communication		
				& VLSI Design		
12.	Garima	Ph.D.	Assistant	Electronics &		Nil
	Cahndel	(Pursuing)	Professor	Communication		
13.	Manju	M.Tech.	Assistant	Electronics &	7.5 years	Nil
	Singh		Professor	Communication	-	
14.	P.K	M.Tech.	Assistant	Biomedical	7+ years	Nil
	Pradhan		Professor	engineering		
15.	Manveen	M.Tech.	Assistant	Electronics &	5 Years	Nil
	Chadha		Professor	Communication		
16.	Manish Rai	M.Tech.	Assistant	Communication	2 years	Nil
			Professor	system		
17.	Yogesh	M.Tech	Assistant	Electronics &	12 Years	Nil
	Kumar	Ph.D.	Professor	Communication		
	Gupta	(Pursuing)				
18.	Mr.	M.Tech	Assistant	Digital	10 years	Nil
	Praveer		Professor	Communication		
	Kumar					
	Saxena					

- 11. List of senior Visiting Faculty: NIL
- 12. Percentage of lectures delivered and practical classes handled (programme-wise) by temporary faculty:  ${\rm NIL}$
- 13. Student Teacher Ratio (Programme-wise)

For M.Tech - (12:1)

# 14. Number of academic support staff (technical) and administrative staff: sanctioned, filled

Position	Sanctioned	Filled
Lab Technician	05	05

## 15. Qualifications of teaching faculty with (D.Sc./D.Litt./Ph.D./MPhil/ PG.)

S.No.	Name	Qualification
1.	Dr.Lokesh Kumar Bansal	Ph.D.
2.	Dr. Leena Arya	Ph.D.
3.	Ashish Gupta	Ph.D.(Pursuing)
4.	Jugal Kishore	Ph.D.(Pursuing)
5.	Monika Bhatnagar	Ph.D.(Pursuing)
6.	Agha Asim Husain	M.Tech.
7.	Amendra Bhandari	M.Tech.
8.	Seema Srivastava	M.Tech.
9.	Md Rashid Mahmood	Ph.D.(Pursuing)
10.	Navneet Choudhary	Ph.D.(Pursuing)
11.	Prabhakar Sharma	M.Tech.
12.	Garima Cahndel	Ph.D.(Pursuing)
13.	Manju Singh	M.Tech.
14.	PK Pradhan	M.Tech.
15.	Manveen Chadha	M.Tech.
16.	Manish Rai	M.Tech.
17.	Yogesh Kumar Gupta	Ph.D.(Pursuing)
18	Praveer Kr. Saxena	M.Tech

# 16. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received.

Department	Agency	Amount	Sanctioned Letter Detail
		Sanctioned	

Electronics &	AICTE	Rs.1,00000/-	RFID/SEM/127/2011-
Communication Engineering			12/Dated-15.12.2011
Electronics &	DST	Rs.50,000/-	SR/SS/34/2011-12/Dated-
Communication Engineering			21.04.2011

17. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.and total grants received.

NIL

18. Research centre/facility recognized by the university

No

#### 19. Publications:

**Publication per faculty** 

Number of papers published in peer reviewed journals (national /international) by faculty

Number of publications listed in International Database (e.g. Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Science Directory, EBSCO host, etc.)

**Monographs** 

**Citation Index** 

**SNIP** 

**SJR** 

**Impact Factor** 

h-index

See the Annexure for details.

			2011-1	2			2012-13			2013-14					
Name of Faculty	Paper Pub	Paper presented	Sem/Conf/ Workshop/FDP		Others	Paper Pub	Paper presented	Sem/ Conf/ Workshop/ FDP	Award recognition	Others	Paper Pub	Paper presented	Sem/ Conf/ Workshop/ FDP	Award recognition	Session Chair
Dr.Lokesh	1	1				2					1				

Kumar												
Bansal												
Dr. Leena		2				1		2		3		2
Arya												
Ashish					3				1			
Gupta												
Jugal	1	3			2							
Kishore												
Monika					3		1					
Bhatnagar												
Agha Asim		2	3		3							
Husain												
Amendra			1		3		2		1			
Bhandari												
Md Rashid		1										
Mahmood												
Prabhakar		5			2							
Sharma												
Garima		5										
Cahndel												
Manju		2										
Singh												
Manveen					5				1			
Chadha												
	<u> </u>				<u> </u>							

## 20. Areas of consultancy and income generated

No

## 21. Faculty as members in

a) National committees b) International committees

S.No.	Name of Faculty	Name of Professional Bodies	Grade of membership	Membership No.
1.	Dr. Leena Arya	ISOC	Global Member	1896
2.	Dr. Lokesh Kr. Bansal	Indian Society for Technical Education	Life time member	LM 38370
		Institute of Engineers (INDIA)	Life time associate member	AM094057/5

### c) Editorial Boards

S.No.	Name of Faculty	Name of International Journal/Conference
1	Dr. Lokesh Kumar	Second International Conference of Networks and
	Bansal	Communications (NC 2014)
2	Dr. Leena Arya	International Journal of Scientific Engineering and Technology (IJSET) with ISSN: 2277-1581
3	Mr. Prabhakar Sharma	IJECSE

### 22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/ programme

100%

b) Percentage of students placed for projects in organizations

NIL

23. Awards/ Recognition received by faculty and students

Faculty awards

### > Dr. Leena Arya

2012: [Outstanding Ph.D. Thesis Award] International Conference on Soft Computing for problem Solving SocPros-2012, Dec 2012, Jaipur, India 2012.

- 2012: [Best Paper Award] Recent Advances in Digital Information Communication Technology (RADICT- 2012), pp.367-372, November 2012, Faridabad, India.
- **2010** [Best Paper Award] National Conference on Contemporary and Futuristic Trends in Computer Science and Engineering, pp.1-8, November 2010, Palwal, India.
- 2008 [Best Paper Award] 3rd International Conference on Advance Computing & Communication Technology, APIIT, pp.373-377, November 2008, Panipat, India.

### 24. List of eminent academicians and scientists/ visitors to the department

Sr. No	Name of the Person	Name of coordinator	Affiliation	Topic	Date and Duration
1.	Prof. S.C. Dutta Roy	Dr. A.k. Singh	IIT Delhi	Signal Processing	24 <sup>th</sup> February, 2012/9.30 - 10.30 A.M
2	Prof. S.N. Sharan	Dr. A.K.singh	GNIT Greater Noida	Adaptive signal processing	24 <sup>th</sup> February, 2012/10.45 to 11.30 A.M
3.	Prof. D.P. Kothari	Dr. V.K. Chadana	IIT Delhi	Energy Environment Problems facing the Third World and their probable solutions	24 <sup>th</sup> February, 2012/11.30 - 12.15 P.M.
4	Prof. Mini S. Thomas	Dr. V.K. Chadana	JMI New.Delhi	Scada Network in Power System	24 <sup>th</sup> February, 2012/12.45 – 1.30 P.M
5	Prof. D. R. Bhaskar	Dr. A.k. Singh	JMI New.Delhi	Analog Signal Processing: Gm-C approach	24 <sup>th</sup> February, 2012/1.30 - 2.15 P.M.
6	Prof. P. Kumar	Dr. V.K. Chadana	DTU New Delhi	Broadband Communication	25 <sup>th</sup> February, 2012/9.30 - 10.15 A.M.

7	Prof. Shirshur	Dr. V.K.	IIIT	Signal	25 <sup>th</sup>
	Verma	Chadana	Allahabad	processing for	February, 2012/10.15 -
				smart sensor	11.00 A.M.
				and system	
8	Prof. Majid Jamil	Mr. R.K	JMI New	Renewable	25 <sup>th</sup>
		Yadav	Delhi	Energy Sources	February, 2012/11.30 -
				and Distributed	12.15 P.M.
0	D C D C I :	14 5 4	10	Generation	
9	Prof. R C Jain	Mr. R.K	JP	Image and	25 <sup>th</sup> February,
		Yadav	University Noida	Multi	2012/2.30 -
			Noida	Dimensional Signal	3.15 P.M
				Processing	
10	Prof. Raj Senani	Mr. Ashish	NSIT, New	Analog	25 <sup>th</sup>
	1101. Italy Scham	Gupta	Delhi	Integrated	February,
		Capta		Circuit: Trans	2012/3.45 -
				linear circuits	4.30 P.M
11.	Prof. R.K.	Dr.Lokesh	Vice	Emerging	28 <sup>th</sup>
	Khandal	Kumar	Chancellor	Trends in	March,_2014
		Bansal	UPTU,	Engineering	
			Lucknow		
12.	Prof. V.K.Jain	Dr.Lokesh	IIT Delhi	Advancement	28 <sup>th</sup>
		Kumar		in	March, 2014
		Bansal		Communication	
10	D (D III I I			in Engineering	a oth a s
13.	Prof.D.K.Lobiyal	Dr.Lokesh	JNU Delhi	Sensor	28 <sup>th</sup> March, 2014
		Kumar		Network	201 <del>4</del>
1.4	Dr.Kushal.K.Shah	Bansal	HT Delle:	Diamadia -1	20 <sup>th</sup> M1-
14.	Dr.Kusnai.K.Snan	Dr.Lokesh Kumar	IIT Delhi	Biomedical	28 <sup>th</sup> March, 2014
		Bansal		Engineering	2011
16.	Dr. Piyush	Dr. Leena	Ericsson	Cloud	29 <sup>th</sup> March,
10.	Maheswari	Arya	India	Computing	29 Maich, 2014
	Tradico wall	11174	Limitted	Companing	
				1	

## 25. Seminars/ Conferences/ Workshops organized & the source of funding

## a) National

## Sponsored by external agency

Department	Agency	Name of	Name of	Amount	Sanctioned
			the		

		Coordinator	Conference	Sanctioned	Letter Detail
Electronics & Communication Engineering	AICTE	Dr. A.K Singh	ASTEE201 2	Rs.1,00,000	RFID/SEM/1 27/2011- 12/Dated- 15.12.2011
Electronics & Communication Engineering	DST	Mr. R.K. Yadav	NCMASP- 2011	Rs.50,000	SR/SS/34/20 11-12/Dated- 21.04.2011
Electronics & Communication Engineering	Rockw ell Automa tion & CETPA	Dr.Lokesh Kumar Bansal	RACE-2014	Rs.10,000	

## Sponsored by college

Applications of Signal Processing in Electrical and Electronics Engineering.  (ASPEE-2012)  3 A Robotics Workshop on "Unmanned Aerial Vehicle". Communication Feb 201	S. No.	National/ International	Department	Name of the	
Training Programs  1 Organized two day National Conference on Microwave, Antenna and Signal Processing, Sponsored by DST New Delhi.  2 Organized two day Seminar on Applications of Signal Processing in Electrical and Electronics Engineering.  (ASPEE-2012)  3 A Robotics Workshop on "Unmanned Aerial Vehicle". Organized by YOGIKI a Chennai based organization.  4. A training program organized by Rockwell Automation India Pvt Ltd  5. Organized two day National Electronics and RACE-2014  Electronics and Communication  Electronics and Robotics Workshop  29-30 <sup>th</sup> Septem 2011  22-23 <sup>rd</sup> April April ASPEE-2012  Electronics and Communication  Communication  Training Program on March SCADA & PLC  29-30 <sup>th</sup> Septem 2011		Conferences/ Workshops/		Conference/	Date
1 Organized two day National Conference on Microwave, Antenna and Signal Processing, Sponsored by DST New Delhi. 2 Organized two day Seminar on Applications of Signal Processing in Electrical and Electronics Engineering. (ASPEE-2012) 3 A Robotics Workshop on "Unmanned Aerial Vehicle". Organized by YOGIKI a Chennai based organization. 4. A training program organized by Rockwell Automation India Pvt Ltd 5. Organized two day National Electronics and RACE-2014 22-23 <sup>rd</sup> April 22011 22-23 <sup>rd</sup> April 2011 24 <sup>th</sup> - 25 Feb 201 24 <sup>th</sup> - 25 Feb 201 25-2012 24 <sup>th</sup> - 25 Feb 201 26-2012 27-2014 29-30 <sup>th</sup> Septem 2011 2011 2014		Training Programs		Workshops/	
Conference on Microwave, Antenna and Signal Processing, Sponsored by DST New Delhi.  2 Organized two day Seminar on Applications of Signal Processing in Electrical and Electronics Engineering.  (ASPEE-2012)  3 A Robotics Workshop on "Unmanned Aerial Vehicle". Organized by YOGIKI a Chennai based organization.  4. A training program organized by Rockwell Automation India Pvt Ltd  5. Organized two day National Electronics and RACE-2014  April 2011  2011  2011  24th - 25 Feb 201  Communication  ASPEE-2012  Electronics and Communication  Communication  Training Program on March 2014				Training Programs	
Antenna and Signal Processing, Sponsored by DST New Delhi.  2 Organized two day Seminar on Applications of Signal Processing in Electrical and Electronics Engineering.  (ASPEE-2012)  3 A Robotics Workshop on "Unmanned Aerial Vehicle". Organized by YOGIKI a Chennai based organization.  4. A training program organized by Rockwell Automation India Pvt Ltd  5. Organized two day National Electronics and RACE-2014  2011  2011  ASPEE-2012  Electronics and Communication Communication  Robotics Workshop 29-30 <sup>th</sup> Septemic 2011  Training Program on March SCADA & PLC 2014	1	Organized two day National	Electronics and	MASP-2011	22-23 <sup>rd</sup>
Sponsored by DST New Delhi.  2 Organized two day Seminar on Applications of Signal Processing in Electrical and Electronics Engineering.  (ASPEE-2012)  3 A Robotics Workshop on "Unmanned Aerial Vehicle". Organized by YOGIKI a Chennai based organization.  4. A training program organized by Rockwell Automation India Pvt Ltd  5. Organized two day National Electronics and RACE-2014  24th - 22 Feb 201  Communication Communication  Electronics and Communication  Communication SCADA & PLC  29-30th Septem 2011  Training Program on March SCADA & PLC  2014		Conference on Microwave,	Communication		April
2 Organized two day Seminar on Applications of Signal Processing in Electrical and Electronics Engineering.  (ASPEE-2012)  3 A Robotics Workshop on "Unmanned Aerial Vehicle". Organized by YOGIKI a Chennai based organization.  4. A training program organized by Rockwell Automation India Pvt Ltd  5. Organized two day National Electronics and RACE-2014  Electronics and Robotics Workshop Communication Scapa on March Scapa on March Scapa on Scap		Antenna and Signal Processing,			2011
Applications of Signal Processing in Electrical and Electronics Engineering.  (ASPEE-2012)  3 A Robotics Workshop on "Unmanned Aerial Vehicle". Organized by YOGIKI a Chennai based organization.  4. A training program organized by Rockwell Automation India Pvt Ltd  5. Organized two day National Electronics and RACE-2014  Electronics and Training Program on March SCADA & PLC  29-30 <sup>th</sup> Septem 2011		Sponsored by DST New Delhi.			
Processing in Electrical and Electronics Engineering.  (ASPEE-2012)  3 A Robotics Workshop on "Unmanned Aerial Vehicle". Communication Organized by YOGIKI a Chennai based organization.  4. A training program organized by Rockwell Automation India Pvt Ltd  5. Organized two day National Electronics and RACE-2014  28-29 <sup>th</sup>	2	Organized two day Seminar on	Electronics and	ASPEE-2012	24 <sup>th</sup> - 25 <sup>th</sup>
Electronics Engineering.  (ASPEE-2012)  3 A Robotics Workshop on "Unmanned Aerial Vehicle". Organized by YOGIKI a Chennai based organization.  4. A training program organized by Rockwell Automation India Pvt Ltd  5. Organized two day National Electronics and RACE-2014  Electronics and Training Program on March SCADA & PLC  28-29 <sup>th</sup>		Applications of Signal	Communication		Feb 2012
(ASPEE-2012)  3 A Robotics Workshop on "Unmanned Aerial Vehicle". Organized by YOGIKI a Chennai based organization.  4. A training program organized by Rockwell Automation India Pvt Ltd  5. Organized two day National Electronics and RACE-2014  Electronics and Training Program on March SCADA & PLC  29-30 <sup>th</sup> Septembre 2011  Communication SCADA & PLC  2014		Processing in Electrical and			
3 A Robotics Workshop on "Unmanned Aerial Vehicle". Organized by YOGIKI a Chennai based organization.  4. A training program organized by Rockwell Automation India Pvt Ltd  5. Organized two day National Electronics and RACE-2014  Electronics and Training Program on March SCADA & PLC  Organized two day National Electronics and RACE-2014		Electronics Engineering.			
3 A Robotics Workshop on "Unmanned Aerial Vehicle". Organized by YOGIKI a Chennai based organization.  4. A training program organized by Rockwell Automation India Pvt Ltd  5. Organized two day National Electronics and RACE-2014  Electronics and Training Program on March SCADA & PLC  29-30 <sup>th</sup> Septem 2011  Communication SCADA & PLC  2014		(4 9777 2012)			
"Unmanned Aerial Vehicle". Organized by YOGIKI a Chennai based organization.  4. A training program organized by Rockwell Automation India Pvt Ltd  5. Organized two day National Electronics and RACE-2014  29-30 <sup>th</sup> September 2011  29-30 <sup>th</sup> September 2011  Communication SCADA & PLC  29-30 <sup>th</sup> September 2011		(ASPEE-2012)			
"Unmanned Aerial Vehicle". Organized by YOGIKI a Chennai based organization.  4. A training program organized by Rockwell Automation India Pvt Ltd  5. Organized two day National Electronics and RACE-2014  29-30 <sup>th</sup> September 2011  29-30 <sup>th</sup> September 2011  Communication SCADA & PLC  29-30 <sup>th</sup> September 2011	3	A Robotics Workshop on	Electronics and	Robotics Workshop	
Chennai based organization.  2011  4. A training program organized by Rockwell Automation India Pvt Ltd  5. Organized two day National Electronics and RACE-2014  2011  Electronics and SCADA & PLC  2014  28-29 <sup>th</sup>		_		1	29-30 <sup>th</sup>
Chennai based organization.  2011  4. A training program organized by Rockwell Automation India Pvt Ltd  5. Organized two day National Electronics and RACE-2014  2011  Electronics and SCADA & PLC  2014  28-29 <sup>th</sup>		Organized by YOGIKI a			September
4. A training program organized by Rockwell Automation India Pvt Ltd  5. Organized two day National Electronics and RACE-2014  Electronics and SCADA & PLC  2014  28-29 <sup>th</sup>		1 -			_
by Rockwell Automation India Pvt Ltd  Communication SCADA & PLC  2014  5. Organized two day National Electronics and RACE-2014  28-29 <sup>th</sup>		_			
Pvt Ltd  5. Organized two day National Electronics and RACE-2014 28-29 <sup>th</sup>	4.				
5. Organized two day National Electronics and RACE-2014 28-29 <sup>th</sup>		by Rockwell Automation India	Communication	SCADA & PLC	2014
		Pvt Ltd			
	5	Organized two day National	Flectronics and	RACE-2014	28_20 <sup>th</sup>
	J.			KACE-2014	
Comerence on Recent Communication   Water		Conference on Recent	Communication		iviaicii

Advances in Electronics &	2014
Communication Engineering"	
(RACE-2014)	

b) International: NIL

## 26. Student profile programme/ course wise:

Name of the	Applications	Selected	Enro	lled	Pass
Course/programme B.Tech-ECE	received	Selected	*M	*F	percentage
2009-13	114	90	76	14	78.82
2008-12	89	60	51	9	84.38
2007-11	87	59	49	10	85.96

\*M = Male \*F = Female

### 27. Diversity of students

Name of the Course B.Tech-ECE	% of students from the same state	% of students from other States	% of students from abroad
2013-14	32%	68%	0%
2012-13	38%	62%	0%
2011-12	36%	64%	0%

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.?

GATE (BATCH-2013-14): 3 Students

## 29. Student Progression

Student progression	Against % enrolled
UG to PG	Approx. 10%
PG to M.Phil.	Nil
PG to Ph.D.	Nil

Ph.D. to post-Doctoral	Nil
Employed  • Campus selection	50%
Other than campus selection	Nil
Entrepreneurship/ Self-employment	Nil

#### 30. Details of infrastructural facilities

### **Physical Facilities**

The department of Electronics and Communication has 7 Class rooms for UG & PG. Department has one class room with LCD projector. The department has twelve well equipped laboratories. The student computer ratio in the lab is 1:1. Internet facility available for the students in library. Every faculty of the department having separate cabin with computer and internet facility. All the cabins are equipped with air-condition.

#### a) Library

Number of Books	150
Proceedings of conference	1
Journals	7
CDs	

#### b) Internet facilities for staff and students

LAN is available for faculties in their cabins. The internet facility is available in computing lab and college provides own e-mail facility to faculty and students.

## c) Class rooms with ICT facility: No

## d) Laboratories

- 1. Integrated Circuit Lab
- 2. PCB Lab
- 3. Optical Fiber Communication Lab
- 4. Microwave Lab
- 5. CAD of Electronics Lab
- 6. Microprocessor Lab
- 7. Digital Electronics Lab
- 8. Electronics Lab
- 9. Communication-I&Ii Lab

# 31. Number of students receiving financial assistance from college, university, government or other agencies

CATEGORY	2013-14	2012-13	2011-12	2010-11
General	23	38	56	62
OBC	31	40	55	43
	8	8	3	
Minority	0	0	3	
SC	9	17	25	27
Special Scholarship				
Scheme for J & K students	4			

# **32.** Details on student enrichment programmes (special lectures / workshops / Seminar) involving external experts

Institution provide core options/ Elective options etc at UG & PG level

- (i) At UG level the options are provided at the 7<sup>th</sup> & 8<sup>th</sup> semester which is mainly based on market demand.
- (ii) At UG level in 8<sup>th</sup> semester industrial training is compulsory. Students are required to work in the industry of their choice to do their project work. Students are even allowed to visit abroad in multinational companies.
- (iii) At PG level in 2<sup>nd</sup> & 3<sup>rd</sup> semester the elective options are provided and the final semester is dedicated only for the project which is the innovative work of the students.
- (iv) Through lateral entry Diploma passed students allowed to swap branches.
- (v) Value addition courses and course enrichment is achieved through Language laboratories, CAD Laboratories, NPTEL Learning, Smart Class room Learning, organizing Seminars and workshops, organizing industrial visits, extension lecturers etc.

#### 33. Teaching methods adopted to improve student learning

- The major consideration are:
  - (i) To participate in the training programme conducted by the institution in the campus and other reputed institutions across the country.
  - (ii) To provide the access to the disadvantage group such as educationally backward minority community SC/ST, educationally weaker section etc.

- (iii) Organize personality development programmes for third year and final year students.
- (iv) To increase practical and technical aspects of current industries and research, expert lectures from industries and education persons are conducted.
- > The teaching learning process followed by the college helps the faculty to handle the courses effectively. For each course delivered, a file is maintained, comprising of the following
  - a. Lesson plan
  - b. Course file
  - c. Syllabus
  - d. Timetable
  - e. Class notes (Lecture Notes)
  - f. University Question papers
  - g. Sessional and PUT test
  - h. Academic monitoring system through online filling daily, weekly and semester wise (ADR, AWR).

## 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- a) The institute has motivated the students to maintain plastic free campus by banning the use of plastic in the campus through which students imbibe the sense of ownership and responsibilities to maintain full greenery to reduce the level of carbon dioxide and increasing the level of oxygen within the premises of college and taking all safety precautions for insolvency of hazardous.
- b) Organized blood donation camp in cooperation with rotary blood bank New Delhi.
- c) Organized Plantation/Environment Awareness campaign.
- d) Health check-up camps are organized in association with Surya Hospital Greater Noida (ITS) for local area people.
- e) Corporate Social Responsibility (CSR) Cell of our institute is now actively involved in literacy programme for underprivileged people and their children.
- f) Provide easy and cheap access to computer education to our supporting staff.
- g) Provide English learning classes to our supporting staff.
- h) The education group have taken to become more eco friendly

- i) **Massive Plantation:** The institute planted more than 2000 trees in our engineering college campus. Apart from these trees more than sufficient number of hedges and plants all along the internal roads and in front of all the blocks.
- j) **Solar Heaters in Hostels:** Use zero electricity for heating water during winters in all hostels. Daily approximately 15000 liters of water is heated, for which sufficient numbers of solar heaters have been installed on hostel rooftops.
- k) Solar Power plant: To decrease its dependence on conventional energy and give an impetus to the use of non conventional energy college decided to install a 50 KW solar power plant in the engineering college.
- 1) **Rain Water Harvesting:** In our Engineering College we have made four collection points where we collect rain water through dedicated drainage system. Institute construct 8 reverse boring in those reservoirs which replenishes the ground water.

# 35. SWOC (Strength, Weakness, opportunity and Challenge) analysis of the department and future plans:

### Strength

- The Department offers students to develop themselves as fully integrated individuals.
- The Department has a dedicated faculty, highly efficient support staff, which is available on the campus and take care of all aspects of the campus, the academic and the personal.
- Dedicated faculty and eager students' works as an ideal combination for information generation.
- The Department can boast of near perfect academic discipline. There has been no disruption in the Academic Calendar due to disturbances that institutions of higher learning generally experience in India.
- Visiting Industry professionals give our students the practical approach to the various theoretical aspects learnt during regular course.
- The existence of a healthy campus life with no incidence of ragging or any activity that is detrimental to their academic pursuits.
- The performance of the students in the National level competitive and entrance examinations like GATE, CAT, public sectors etc. has been excellent.
- The infrastructural support offered by the College to students can be compare with the
  best in this part of the country. The good teacher-student ratio makes it possible for
  teachers to successfully address individual need of the students.

- The department organizes various seminars/workshops and National conferences for the students and faculty as well every year.
- The Department has an active alumni association which works in close co-operation with the College administration. It offers scholarship to the existing as well as passed out students. It also offers medical help to the existing students and needy people belonging to the neighborhood.
- The CRC of the College have been very active and have participated with great enthusiasm in activities like blood donation, first aid training, health awareness survey etc.
- The College receives active co-operation from the parent university (UPTU). They have been of great help in running the College by offering their expertise in establishing the administrative and academic set-up in the post- autonomy period.

#### Weaknesses

- The socio-economic background of many of the students (some of them are first and second generation learners) admitted in the College is responsible for poor language competence (both in their mother tongue as well as English). This leads to an unsatisfactory level of comprehension and communication, particularly in the first two semesters.
- But in next semesters they improve when they come in contact with the professors and other students of good communication skills.

#### **Opportunities**

- To improve teaching process the college inculcates team spirit among the learners.
- The level of academic excellence which the College has acquired makes it possible for our students to get entry into institutes of global repute. The College has to devise mechanisms for translating this potential into a reality.
- The new learning of the age requires greater proficiency in soft skills among students.
   The College has the necessary technical and infrastructural resources to take this to a higher level.
- The vision of the College makes it imperative to engage in socially relevant programs such as organizing voluntary blood donation camps, AIDS awareness programs, and disaster management skills. The College with its resources and networking can ensure students' greater participation in these activities.

• The College possesses the academic and financial resources to publish peer reviewed research journals for students and faculties.

## Challenges

Retaining the unique character of the College in an increasingly consumerist society poses a great challenge to the ideals the institution upholds.

To retain the college's reputation by increasing the result of all the years has become an uphill task on the part of college faculties and students keeping in view the students capability to excel in exam.

### **Future Plan**

### **Long Term**

To obtain project grant from DST, UGC etc. for research projects.

To organize an International conference with a reputed society like IEEE, Springer etc.

### **Short Term**

Develop a departmental library with adequate sitting.

## **ANNEXURE**

## **List of Publications**

## **Publication in Journals**

S. No	Title of paper	Author(s) Names	Name of the Journal	Vol. & Year	Page No.	ISSN
1	Performance of STTC-MC-CDMA Systems with Imperfect Channel Estimation	Lokesh Kumar Bansal Aditya Trivedi Rekha Gupta	Wireless Personal Communications	75(1) 2014	49-61	0929- 6212
2	Performance of Reduced State S-T Trellis Coded MC-CDMA Systems	Lokesh Kumar Bansal Aditya Trivedi	Journal Wireless Personal Communications	2013		0929- 6212
3	Performance evaluation of downlink space-time coded MC-CDMA systems in presence of channel estimation	Lokesh Kumar Bansal Aditya Trivedi Rekha Gupta	Communications (ACTA Press-Canada),	1 2012.	1-7	1925- 7929
4	Implementation of Space-Time Turbo Coded MC-CDMA Systems	Lokesh Kumar Bansal Aditya Trivedi	International Journal of Computer and Electrical Engineering (IACSIT Press- Singapore)	4( 6) 2012	896-899	1793- 8163
5.	Performance Evaluation of Space-Time Turbo Code Concatenated with Block Code MC- CDMA Systems	Lokesh Kumar Bansal Aditya Trivedi	International Journal of Computer Science and Information Security (USA)	9(1) 2011	108-115	1945- 5500
6.	Comparative Study of Different Space- Time Coding Schemes for MC-CDMA Systems	Lokesh Kumar Bansal Aditya Trivedi	International Journal of Communications, Network and System Sciences	3(4), April 2010	418-424	1913- 3723
7.	Comparative Study of Space-Time Trellis Code with Space-Time Block Code MC- CDMA System	Lokesh Kumar Bansal Aditya Trivedi	International Journal on Information and Communication Technologies (India)	2(1-2) 2009		0973- 5836).
9.	Optimal Coverage of Access Points Using Path Loss Model for Indoor WLAN Systems	Leena Arya, S.C. Sharma Millie Pant	IJ-ETA-ETS,	3(1), 2010	672-675,	0974- 3588)
10.	Coverage of Access Points Using Particle Swarm Optimization Using Path Loss Model in WLAN	Leena Arya, S.C. Sharma Millie Pant	(IJRTE) International Journal of Recent Trends in Engineering,	3(4) 2010.	50-52	1797- 9617

11	Performance Analysis of Indoor Positioning System)  Design & Fabrication of	Leena Arya S.C. Sharma Millie Pant	(IJACSA) International Journal of Advanced Computer Science and Applications, CURIE Journal	1(4), 2010	37-41 12-16,	0974-
13	GSM Based Robot Control Coverage of Access Points Using Particle Swarm Optimization in Indoor	S.C. Sharma Leena Arya S.C. Sharma Millie Pant	BAIP 2010, CCIS70,	2009	332–336	1305)
14	WLAN  A Novel Approach for Realization of Higher Order Filter using Bipolar and MOS Current-Mirrors	Ashish gupta, Amendra Bhandari, A. Agha Husain Manveen S. Chadha	IOSR Journal of Electronics and Communication Engineering (IOSR- JECE)	9(1) 2014	99-104	
15	Lossy and Lossless Current-mode Integrators using CMOS Current Mirrors	Amendra Bhandari, Agha A. Husain, Manveen S. Chadha, Ashish Gupta	International Journal of Engineering Research and Development	9(3) 2013	34-41	2278- 067X,
16	Design of High Frequency Current-Mode Continuous- Time Filter using CMOS Current-Mirrors	Agha A. Husain Manveen S. Chadha Ashish Gupta Amendra Bhandari	IOSR Journal of VLSI and Signal Processing (IOSR-JVSP)	3(6) 2013	58-62	2319 - 4200
17	Third Order Current-Mode Filter Realization using CMOS Current-Mirror	Manveen S. Chadha, Ashish Gupta, Amendra Bhandari, Agha A. Husain	IOSR Journal of Engineering (IOSRJEN)	3(12) 2013	32-39	2278- 8719
18	Circular Polarized Microstrip Patch Antenna for Satellite Communication	Monika Bhatnagar	International Journal of Advance and Emerging Technology	3(2) 2013		2321- 452X
19	Accurate Design of Corner Fed Square Slot Patch Antenna for Circular Polarization	Monika Bhatnagar A.K.Gautam	American Journal for Engineering Research,	Novembe 2013		2320- C-936.
20	Design and Study of wideband Single Feed Circularly Polarized Microstrip Antennas	Monika Bhatnagar A.K.Gautam	International Journal of Electronics and Communication	5(1)	1-8	2231- 1246

21	Design of Hexagonal Patch Antenna for Mobile Wireless System	Jugul Kishor Ram Lal	International Journal of Science, Technology and	2(4) 2011	34-38	
22	Compensation of Dielectric Cover Effects on CP Hexagonal Microstrip Antenna	R. K. Yadav, Jugul Kishor R L Yadava	Management International Journal of Electronics and Communication Engineering & Technology (IJECET),	4(1) 2013	43-54	0976 – 6472
23	Effects of Temperature Variations on Microstrip Antenna	R. K. Yadav Jugul Kishor R L Yadava	International Journal of Networks and Communications (USA),	3(1)	21-24	
24	Simulation & Comparison of AODV,DSR and AOMDV routing protocols in MANETs	Manveen S. Chadha	International Journal of Soft Computing and Engineering	2(3) 2012		2231- 2307
25	Simulation & Comparison of CSFQ, RED & FRED Queuing Techniques Journal	Manveen S. Chadha	International Journal of Soft Computing and Engineering	2(3) 2012		2231- 2307
26	TE01δ Mode Low Pass and Band Pass Dielectric Resonator Filter	Md Rashid Mahmood M.T Beg	European Journal of Scientific Research	108		
27	Ultra Wideband Seven Poles Lowpass Filter Using DGS Array	Rashid Mahmood Pramod Kumar Neelam Srivastava Anil Kumar	International Journal of Computer Science and Technology (IJCST).	1(1) 2010		

## **Publication in Conferences**

S. No	Title of paper	Author(s) Names	Name of the Conference	Venue	Year
1.	Digital Image Processing Method for the Analysis of Cholelithiasis	Neha Mehta SVAV Prasad Leena Arya	Third International Conference on Soft Computing for Problem Solving (SocProS-2013)	IIT Roorkee, Greater Noida Extension Centre, Greater Noida	26-28 Dec 2013
2	Coverage and Analysis of Obstructed Indoor WLAN using Simulation Software and Optimization Technique	Leena Arya S. C. Sharma	World Conference on Advances in Communication and Control Systems, CACCS-2013	Dehradun Institute of Technology University. Dehradun	April 2013
3	Coverage of Indoor WLAN in Obstructed Environment using Particle Swarm Optimization	Leena Arya S. C. Sharma	SocPros-2012- Springer	JK Lakshmipat University, Jaipur	28-30 December
4	Improving Wireless Local Area Networks Performance using Particle Swarm Optimization", International conference on soft computing for problem solving	Leena Arya S.C. Sharma Millie Pant	SocProS-2011- Springer	IIT Roorkee	20-22, December 2011
5	Design of Broad Band Microstrip Shorted Patch Antenna With Semicircular Cut on Non Radiating Edge	Pramod Kumar Rashid Mahmood Jugul Kishor A. K. Shrivastava	International Conference on Emerging Trends in Electronic and Photonic Devices & systems (ELECTRO- 2009)	IT BHU	22-24, December 2009
6	Designing of a Compact Microstrip Antenna Resonating at 4.8 (GHz.) by Using Size Reduction Technique",	Pramod Kumar, Rashid Mahmood, Jugul Kishor A. K. Shrivastava,	International Conference on Emerging Trends in Electronic and Photonic Devices & systems (ELECTRO- 2009)	IT BHU	22-24, December 2009
7	Control of Band Stop Responses of Very Compact Size Microstrip Filter of Improved Q factor & Sharp Transition by Using hexagonal Transmetal DGS NAAC-SSR 1.T.S	Pramod Kumar, Rashid Mahmood, Jugul Kishor A. K. Shrivastava,	International Conference on Emerging Trends in Electronic and Photonic Devices & systems (ELECTRO- 2009) LEGE, GREATER NOIDA	IT BHU	22-24, December 2009

#### **Books Edited**

### Books with ISBN/ISSN numbers with details of publishers

#### Mr. Prabhakar Sharma

#### **Book Published:**

- 1. Antenna and Wave Propagation, published by Nandani Prakashan Pvt.Ltd. New Delhi (ISBN: 978-93-81126-22-6).
- 2. Wireless Communication, published by Nandani Prakashan Pvt.Ltd. New Delhi (ISBN: 978-93-81126-42-4).
- 3. Mobile and Wireless Communication, published by Nandani Prakashan Pvt.Ltd. New Delhi (ISBN: 978-93-81126-41-7).
- 4. Electromagnetic Field Theory, published by Nandani Prakashan Pvt.Ltd. New Delhi (ISBN: 978-93-81126-24-0).
- 5. Digital Electronics, published by Nandani Prakashan Pvt.Ltd. New Delhi with ISBN: 978-93-81-126-56-1.
- 6. Digital Logic Design, published by Nandani Prakashan Pvt.Ltd. New Delhi with ISBN: 978-93-81-126-57-8.
- 7. Non –Conventional Energy Resources, published by Shubham Publishing house–New Delhi.
- 8. "Mobile and Wireless Communication" 2nd Revised Edition by Nandani Publication, New Delhi With ISBN no.978-93-81126-56-1.
- 9. "Wireless Communication" 2nd Revised Editio By Nandani Publication, New Delhi with ISBN no. 978-93-81126-42-4.
- 10. Antenna and Wave Propagation, 2ND Revised Edition by Nandani Prakashan Pvt.Ltd. New Delhi (ISBN: 978-93-81126-22-6).

## 3. Evaluation Report of the Departments

- 1. **Name of the Department:** Electrical & Electronics Engineering.
- 2. **Year of establishment:** 2006
- 3. Names of programme/ Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc. D.Litt. etc.): UG
- 4. Name of interdisciplinary courses and the departments/ units involved:

#### **Inflow to EEE Department.**

- Applied science & Humanities: Math, HVE, Industrial Management, Engineering and Managerial Economics, Professional Communication, Human Behavior, Technical Writing
- Management of Business Administration: Personality Development Programmes in Second year & Final Year
- Electronics & Communication Engineering: Analog & Digital communication, Analog Integrated Electronics, Wireless Communication, Microprocessor, Satellite Communication, Data Communication Network, Telemetry & Data Acquisition System.
- 5. Annual/Semester/Choice Based Credit System: Semester based credit system
- 6. Participation of the department in the courses offered by other departments:

### **Outflow from EEE Department:**

- Mechanical Engineering: Sensors & Instrumentation (Theory & Lab)
- Electronics & Communication Engineering: Introduction to Electric Drives.
- Applied Science & Humanities for First year: Basic Electrical Engineering (Theory & lab).
- Information Technology department: Non conversional energy resources, Sensors & Instrumentation.
- Computer science & Engineering Department: Non conversional energy resources, Sensors & Instrumentation.
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc.
- 8. Details of programs discontinued, if any, with reasons: NA
- 9. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professor)

Designation	Sanctioned	Filled
Professor	2	-
Associate Professor	4	1
Assistant Professor	14	11

# 10. Faculty Profile with name, qualification, designation, specialization (D.Sc./D. Lit/Ph.D./M. Phil. Etc.)

Name	Qualification	Designation	Specialization	No of years of Experience in teaching/ Industry
Dr. Vinay Kakkar	Ph.D.	Associate Professor	Power system	14 year in academic & 6 year in industry
Mrs. Gauri Katiyar	M.Tech, Pursuing Ph. D.	Assistant Professor	Digital communication	21 years
Mr. Noorul Islam	M.Tech, Ph. D. (Pursuing)	Assistant Professor	Electrical & Electronics Engineering	10 years in academic & 6 year in industry
Mr. L. Navin Rao	M.Tech, Ph. D. (Pursuing)	Assistant Professor	Power system & Power Electronics	11 Years.
Mr. Mohit Saxena	M.Tech, Ph. D.(Pursuing)	Assistant Professor	Energy management system	14 year
Ms. Kalpana Hazarika	M.E, PGDM Ph.D.(Pursuing)	Assistant Professor	Power Electronics , Electrical Machines & Drives	11.5 years/1 year
Ms. Priyanka Patnaik	B.E, MBA	Assistant Professor	Electrical Engg.	10 year

Ms. Ankita Aggarwal	M.Tech	Assistant Professor	Control system	3.2 year
Mr. Rajneesh Kumar GAhlot	M.Tech	Assistant Professor	Power system	1 year
Ms. Niharika Singh	M.Tech	Assistant Professor	Power electronics	2 year
Mr. Piyush Choubey	M.Tech	Assistant Professor	Control system	3 year
Mr. Jitendar Singh	M.Tech	Assistant Professor	Electrical Power System & Maagement	2 year 10 months

- 11. List of Senior Visiting Faculty: NIL
- 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: NIL

### 13. Student Teacher ratio

Year	<b>Total Students</b>	Actual number Student	No. of Teacher in the Dept.	Student Teacher Ratio
2011-2012	180	154	12	13:1
2012-2013	240	154	12	13:1
2013-2014	300	180	12	15:1

## 14. Number of Academic support staff (technical) and administrative staff, sanctioned & filled.

Designation	Sanctioned	Filled
Technical Staff	4	4

## 15. Qualifications of teaching faculty with DSc/ D. Lit/ Ph.D./ M.Phil/PG:

As in Point No. 10.

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

# 17. Departmental projects funded by DST-FIST, UGC, DBT, ICSSR, etc. and total grants received.

NIL

18. Research centre / Facility organized by the university.

NIL

19. Publications (per faculty): See the Annexure for details of publications

Sl. No	Name Of the Faculty	International Journal	National Journal	International Conference	National Conference
1	Dr. Vinay Kakkar	6	-	2	5
2	Ms. Gauri Katiyar	0	0	3	1
3	Mr. L. Navin Rao	1	2	-	1
4	Mr. Noorul Islam	2	-	1	-
5	Ms. Niharika Singh	2	-	1	1
6	Mr. Piyush Choubey	1	-	-	-
7	Jitendra Singh	1	-	-	1

### 20. Areas of consultancy & income generated: Nil

## 21. Faculty as members in

a) National committees IETE: 1

b) International committees IEEE: 12

c) Editorial boards: Nil

### 22. Student Projects

a) Percentage of students who have done in-house projects including their departmental/ program:

100%.

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories / Industry/ other agencies.

NIL

## 23. Awards / Recognitions received by faculty and students

NIL

## 24. List of eminent academicians and scientists/visitors to the department

Sr.	Name	Name of co-ordinator	Topic
No.			
1.	Prof. Saifur	Dr. V.K. Chandna (HOD EEE)	Smart Grids-Utilities
	Rahman		and Challenges
2.	Mr. Ravindra	Dr. V.K. Chandna, supported by	Smart Electric meter
	Joshi	Ms. Neeti Varshney and Mr.	
		Deepak Singh	
3	Dr. Tariqul	Ms.Monika Bhatnagar , Mr.	Virtual
	Islam	Piyush Chaubey	instrumentation
			sensor and control
4	Prof. Bhim	Mr. Piyush Chaubey, Ms Ankita	Application of
	Singh	Agarwal	brushless DC motor
			in domestic
			appliances

## 25. Seminars/Conferences/Workshops organized & the source of funding.

a. National: 1

b. International: Nil

## 26. Student Profile Program/ Course wise:

Name of the	Batch Application		Selected	Enrolled		Pass
Course/programme (refer question no. 4)	r	received	Selected	*M	*F	percentage
Electrical and Electonics	2009-13	87	59	51	8	71.15
Engineering	2008-12	83	58	53	5	77.08
	2007-11	81	58	47	11	56.41

\*M = Male \*F = Female

## 27. Diversity of students

Name of the Course	Session	% of students from the same state	% of students from other States	% of students from abroad
Electrical and Electonics Engineering	2013-14	39%	61%	0%
	2012-13	34%	66%	0%
	2011-12	39%	61%	0%

# 28. How many student cleared national and state competitive examinations such as NET, SLET, GATE, Civil Services, Defense services etc.:

Name	Name of Examination	Batch
Siddhart, Anmol Agarwal, Ram Ratan	GATE	2006-2010
Vikash Sharma	GATE	2007-2011
Archana, Radheyshyam, Rajkamal	GATE	2008-2012
Shikha, Gaurav	GATE	2009-2013

## 29. Student progression

Student progression	Against % enrolled
TIG T. DG	N'1
UG To PG	Nil
PG To M.Phil	Nil
	INII
PG TO Ph.D	Nil
Ph.D TO Post-Doctoral	Nil
Employed	
	T . 117 1 .: 2010 121 . 1
Campus selection	Total 17 selection - in 2012-13 batch

Other than campus recruitment	Total 14 selection - in 2013-14 batch
Enterpreneurship/ Self-emloyment	Nil

#### 30. Details of Infrastructural facilities.

#### (a) Library

Number of Books	200
Proceedings of conference	Nil
Journals	6
CDs	Nil

- The students are encouraged to utilize the learning materials available in the library.
- The faculty and students refer the online and print journals to publish/ present technical papers.
- The library and Internet centre are kept open beyond the working hours of institution. Students can download the required technical material.

#### (b) Internet Facility

The Department has adequate numbers of computers connected with internet facility for students. All staff rooms are equipped with individual internet facilities.

- (c) Class rooms with ICT facility: Computers are available for specific use in department. The teachers liberally take help of the ICT resources to enrich their prescribed curriculum with the help of internet. The college has provided adequate computer facility for its faculty. Faculty members are provided with computers with internet browsing facility for preparation of teaching/learning materials in their respective departments. Also Multimedia projectors, OHPs are available within the college for the faculty use. The college also has seminar halls equipped with projectors and are available as and when requested by particular teacher. The college also has fully airconditioned conference and training halls.
- (d) Laboratories: The institute has Laboratories with state of the art equipments and machinery for the students to carry out Practical courses, projects and research works.

S.No.	Name of Laboratories
1.	Power System Lab
2.	IPC Lab
3.	EMEC-II
4.	Control System Lab
5.	BSS Lab
6.	EMMI Lab
7.	Network Lab
8.	Sensor & Instrumentation Lab
9.	Electrical Engg. Lab
10.	Power electronics lab

# 31. No. of students receiving financial Assistance from college/University/Government or other Agencies;

2013-14	2012-13	2011-12	2010-11
13	32	38	48
25	28	37	37
0	7	4	
11	14	9	9
1		_	-
	13 25 0	13 32 25 28 0 7	13     32     38       25     28     37       0     7     4

 ${\bf 32.\ Details\ of\ student\ enrichments\ programmes\ (special\ lectures\ /workshops/seminar)}$  with external experts.

Prof. Saifur Rahman	Dr. V.K. Chandna (HOD EEE)	Smart Grids-Utilities and
		Challenges
Mr. Ravindra Joshi	Dr. V.K. Chandna, supported by Ms. Neeti	Smart Electric meter
	Varshney and Mr. Deepak Singh	
Dr. Tariqul Islam	Ms.Monika Bhatnagar , Mr. Piyush Chaubey	Virtual instrumentation sensor and control
Prof. Bhim Singh	Mr. Piyush Chaubey, Ms Ankita Agarwal	Application of brushless DC motor in domestic appliances

# **33. Teaching methods adopted to improve student learning.** These are the following methods are adopted:

#### **Teaching Strategies:**

- ➤ The college follows the academic calendar given by the affiliating university and accordingly plans for lecture and tutorial hours and laboratory hours in all the theory and practical subjects.
- He class time tables are prepared in such a way that the required number of periods are assigned for all the theory and practical subjects and also include the periods
- For association/pre-placement training/library/games and sports activities.

  Special attention is focused on application part of the subject and extra content is delivered wherever necessary to meet the desired learning outcomes.

#### **Learning Strategies:**

- Tutorials are conducted regularly in analytical / design subjects.
- Assignments are made compulsory in all the theory subjects.
- > Seminars are arranged by the students on advanced topics.
- Technical quizzes/group discussions/paper presentations are arranged through departmental associations.
- Industrial tours are arranged to expose the students to practical pursuits.
- Mini projects / model making are made part of the learning.
- > Certificate courses on the use of modern software tools for engineering applications are conducted.
- > Pre placement training is also made as a part of learning to enhance the employability.

#### **Assessment Strategies:**

- Performance evaluation through internal and external examinations in both theory and lab.
- Performance evaluation by conduct of tutorials and assignments.

  Performance evaluation in project work/seminars/comprehensive viva-voce.

## **34.** Participation in Institutional Social Responsibility (ISR) and Extension activities: Yes

# 35. SWOC (Strength, Weakness, Opportunity and Challenge) analysis of the department and future plans:

### **Strength:**

- The Department offers students to develop themselves as fully integrated individuals. The Department has a dedicated faculty, highly efficient support staff, who are available on the campus and take care of all aspects of the campus, the academic and the personal.
- The Department can boast of near perfect academic discipline. There has been no disruption in the Academic Calendar due to disturbances that institutions of higher learning generally experience in India.
- The students of the Department try to live up to the vow of a Vidyarthi and dedicate themselves fully to the acquisition of knowledge and character building exercise. This explains the existence of a healthy campus life with no incidence of ragging or any activity that is detrimental to their academic pursuits.
- The performance of the students of the Department in the national level competitive and entrance examinations like GATE, public sectors etc. has been excellent.
- The infrastructural support offered by the College to students can compare with the best in this part of the country. The teacher-student ratio, which is perhaps unparalleled in the country, makes it possible for teachers to successfully address individual need of the students.
- The Department is considered a reputed institution of higher learning and this makes it possible to get a great deal of support and co-operation from other institutions of higher learning as well as industrial houses, formally and informally.
- The Department has an active alumni association which works in close co-operation with the College administration. It offers scholarship to the existing as well as passed out students. It also offers medical help to the existing students and needy people belonging to the neighborhood.
- The CRC of the College have been very active and have participated with great enthusiasm in activities like blood donation, first aid training, health awareness survey etc.

• The College receives active co-operation from the parent university (UPTU). They have been of great help in running the College by offering their expertise in establishing the administrative and academic set-up in the post- autonomy period.

#### Weaknesses

 The socio-economic background of many of the students (some of them are first and second generation learners) admitted in the College is responsible for poor language competence (both in their mother tongue as well as English). This leads to an unsatisfactory level of comprehension and communication, particularly in the first two semesters.

## **Opportunities**

- The level of academic excellence which the College has acquired makes it possible for our students to get entry into institutes of global repute. The College has to devise mechanisms for translating this potential into a reality.
- The new learning of the age requires greater proficiency in soft skills among students.
   The College has the necessary technical and infrastructural resources to take this to a higher level.
- The vision of the College makes it imperative to engage in socially relevant programs such as organizing voluntary blood donation camps, AIDS awareness programs, and disaster management skills. The College with its resources and networking can ensure students' greater participation in these activities.
- The College possesses the academic and financial resources to publish peer reviewed research journals. The College is poised to take the initiative in this regard.

#### **Challenges:**

- Retaining the unique character of the College in an increasingly consumerist society poses a great challenge to the ideals the institution upholds.
- To retain the college's reputation by increasing the result of all the years has become an uphill task on the part of college faculties and students keeping in view the students capability to excel in exam.

## **Future Plan**

### Long Term-

- M.Tech. program to be start
- DST & AICTE fund for projects

• SCADA lab instalation

## **Short Term**

- FDP program to be organized
- Workshop /Conference/ Seminar to be organized

## **Annexure**

## **List of Publications**

## **Publication in Journals**

S. No	Title of paper	Author(s) Names	Name of the Journal	Vol. & Year	Page No.	ISSN
1	Adaptive FACTS Transient Controller Design using ANFIS Technology	Murari Lal Azad, Vinay kakkar	International Journal of Electrical Engineering (IJEE)	4(4) (2011)	461-472.	974- 2158
2	Impact of Harmonic components on power system operation	Murari Lal Azad, Meenakshi Mataray, Vinay kakkar	International Journal of Multidisciplinary Research and Advances in Engineering (IJMRAE)			097570 74.
3	Economic criterion for Optimal choice and allocation of FACTS devices Using genetic algorithm"	Murari Lal Azad, Vinay kakkar	International Journal of Multidisciplinary Research and Advances in Engineering (IJMRAE)			09757 074.
4	Intelligent Systems for Handwritten Character Recognition: A review	Shabana Mehfuz Gauri katiyar	International Journal of Emerging Technology and Advanced Engineering	2(4), 2012	2012	2250- 2459
5.	Effect of Common Cause Failures on Redundancy Optimization	K. Hazarika G.L.Pahuja	International Journal of Applied Mechanics and Materials	2014	592-594	
6.	Dynamic Performance of Small Photovoltaic (PV) Module,"	L. Navinkumar Rao S Gairola	NIET National Journal,	1(1)	19-22	2229- 5828
7.	Steady-State and Dynamic Performance of the Static Var Compensator (SVC) Phasor Model	L. Navinkumar Rao S Gairola	NIET National Journal	1(1)	19-22	2229- 5828
8.	Single phase five level inverter using multicarrier PWM technology	D. Sandhya, L Navinkumar Rao Lipika Datta,	IJESM	4(1) (Jan-Jun 2014)	97-103	2231- 3273
9.	Dynamic Response of Closed Loop Controlled Chopper Fed Separately Excited Dc Motor Drive	Noorul Islam	International Journal of Engineering, Sciences & Management	4(2), (Jul-Dec 2014)		

## **Publication in Conferences**

S. No	Title of paper	Author(s) Names	Name of the Conference	Venue	Year
1.	Evolutionary Computing Techniques in Off-Line Handwritten Character Recognition: A review	Gauri Katiyar, Shabana Mehfuz	ICACSEE-2012	New Delhi	2012
2	Character Recognition and its Interpretation using Neural network	Gauri Katiyar, Neeta Awasthy	AIPR 09,	Ornaldo (Canada).	2009
3	Orientation feature for fingerprint recognition	Gauri Katiyar, Neeta Awasthy	AICON'09,	CSIT, Durg (C.G).	2009
4	Comparison of Performance of a Zero-Current-Switching (ZCS) and a Zero-Voltage- Switching (ZVS)Based PWM Boost Converter	L. Navinkumar Rao S Gairola	National conference, ETEEE-2011,	KNIET Sultanpur	2011
5	Evaluation & Comparison of Effects of Common Cause Failures on Redundancy Optimization of A Complex Network	K. Hazarika G. L. Pahuja	International conference on Optimization & Parametric Modeling, OPT-2014	NIT Hamirpur	2014

## 3. Evaluative Report of the Departments

1. Name of the department : Mechanical Engineering

2. Year of establishment : 2006

3. Name of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.): UG

4. Name of the Interdisciplinary courses and the department /units involved

Sl.	Interdisciplinary Courses	Year	Department/ Units
No.			involved
1.	Mathematics I (AS 101)	1 <sup>st</sup>	Applied Science and
			Humanities (ASH)
2.	Mathematics II (AS 201)	1 <sup>st</sup>	ASH
3.	Mathematics III (EAS 301)		ASH
4	Human Values and Professional	1 <sup>st</sup>	ASH
	Ethics (EHU 111)		
5	Engineering Physics I (AS 102)	1 <sup>st</sup>	ASH
6	Engineering Physics II (AS 202)	1 <sup>st</sup>	ASH
7	Computer Programming (CS 101/	1 <sup>st</sup>	Computer Science and
	CS 201)		Engineering
8	Electrical Engineering (EE 101/	1 <sup>st</sup>	Electrical and
	EE 201)		Electronics Engineering
9	Electronics Engineering(EC 101/	1 <sup>st</sup>	Electronics and
	EC 201)		Communication
			Engineering
10	Engineering Chemistry (AS 103/	1 <sup>st</sup>	ASH
	AS 203)		
11	Professional communication (AS 105)	1 <sup>st</sup>	ASH
12	Industrial Psychology (EHU 301)	2 <sup>nd</sup>	ASH
13	Industrial Sociology (EHU 402)	2 <sup>nd</sup>	ASH
14	Engineering and Managerial	3 <sup>rd</sup>	ASH
	Economics (EHU 501)		
15	Industrial Management (EHU 601)	3 <sup>rd</sup>	ASH

5. **Annual/semester/choice based credit system (programme wise)** : Semester based credit system

6. Participation of the department in the courses offered by other department

Sl.	Name of course	Year	Name of the Department						
No.									
1.	Quality Management	4 <sup>th</sup>	Computer Science and Engineering, Information Technology, Electronics and Communication Engineering, Electrical and Electronics Engineering						

7. Courses in collaboration with other universities, industries, foreign institutions etc.

**NIL** 

- 8. Details of courses/programs discontinued (if any) with reasons: Nil
- 9. Number of Teaching posts

Sanctioned	Filled
4	NIL
7	4
21	14
	Sanctioned  4  7  21

## 10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. M.Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Prof. Sanjay Yadav	Ph. D.# M.Tech. B.E.	Associate Professor	Production Engineering	16 Years	NA
Dr. Sanjay Mishra	Ph. D. M.Tech., B.E.	Associate Professor	Production Engineering	09 years	Nil
Dr. Bhupendra Prakash Sharma	Ph. D. M.Tech., B.E.	Associate Professor	Mechanical Engineering		Nil
Mr. Suresh Prasad	Ph. D.* M.Tech. B.Tech.	Associate Professor	Industrial Engineering	15 years	NA
Mr. Bhupesh Ojha	M.Tech. B.Tech.	Assistant Professor	Design	15 years	NA
Mr. Arvind Tiwari	Ph. D.* M.Tech., B.Tech.	Assistant Professor	Thermal Engineering	11.6 years	NA
Mr. Md. Kamal Asif Khan	Ph. D.* M.Tech., B.Tech.	Assistant Professor	Production Engineering	10 years	NA
Mr. Dushyant Mishra	M.Tech. B.Tech.	Assistant Professor	Energy Studies	07 years	NA
Mr. Sandeep Patidar	M.Tech. B.Tech.	Assistant Professor	Thermal Engineering	4.5 years	NA
Mr. Manvendra Yadav	M.Tech., B.Tech.	Assistant Professor	Manufacturing Engineering	11 years	NA
Mr. Brijesh Kumar	M.Tech., B.Tech.	Assistant Professor	Production Engineering	15 years	NA

Mr. Uma Shankar	M.Tech.,	Assistant	Thermal	07 years	NA
	B.Tech.	Professor	Engineering		
Mr. Vivekanand	M.Tech.,	Assistant	Applied	1.5 years	NA
Singh	B.Tech.	Professor	Mechanics		
Mr. Ram Kumar	B.Tech,	Assistant	Machine	06 years	NA
	M.Tech.	Professor	Design		
Ms. Farheen	B.Tech,	Assistant	Manufacturing	2.7 years	NA
Fatima	M.Tech.	Professor	Engineering		
Mr. Harsh Gupta	B.Tech,	Assistant	Production	16 years	NA
	M.Tech.	Professor	Engineering		
Mr. Mohd.	B.Tech,	Assistant	Manufacturing	0.8 years	NA
Tauheed	M.Tech.	Professor	Engineering		
Mr. P. K. Sahu	B.Tech,	Assistant	Machine	0.8 years	NA
	M.Tech.	Professor	Design		

<sup>\*</sup>Ph.D pursuing, #Thesis submitted

11. List of senior visiting faculty: Nil

## 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: Nil

## 13. Student -Teacher Ratio (programme wise)

Total sanctioned	No. of	faculty me	mbers requ	uired	Student teacher ratio			
strength (S)	Professor	Asso.	Asst.	Total				
		Prof.	Prof.		Existing	As per UGC		
						norms		
480	4	7	21	32	18:1	15:1		

## 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Category	Sanctioned	Filled
Academic support staff (technical)	8	8
Administrative staff	NIL	NIL

## 15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/M.Phil/PG.

Qualification	Numbers
D.Sc.	0

D.Litt	0
Ph.D	2
M.Phil	0
PG	16

- 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grant received: Nil
- 17. Departmental project funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: Nil
- 18. Research Center / facility recognized by the University: Nil
- 19. **Publications** 
  - (a) Publication per faculty: See the Annexure for the details of publications

S.No.	Name of Faculty	Number of papers published in peer reviewed in journals	Number of publication listed in International Database	Monographs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of	Citation Index	SNIP	SJR	Impact factor	h-index
1	Mr. Sanjay Yadav	3	3	-	1	-	-	13	-	1.27	2.605	-
2	Dr. Sanjay Mishra	8	6	-	1	-	-	5	-	0.476	0.925	-
3.	Dr. Bhupendra Prakash Sharma	11	11	-	1	-	-	58	-	-	1.779	2
3	Mr. Suresh Prasad	2	2	-	1	-	-	-	-	-	-	-
4	Mr. Bhupesh Ojha											-
5	Mr. Arvind Tiwari	2	2	-	1	-	-	1	-	0.28	0.188	-
6	Mr. Md. Kamal Asif Khan	1	0	-	-	-	-	-	-	-	-	-

## 20. Areas of consultancy and income generated

Areas of consultancy	Income generated
Material Testing for ITS Dental College,	Nil
Muradnagar and Greater Noida	

## 21. Faculty as members in

S.No	Name of	National Committees	International	Editorial
	Faculty		Committees	Board
1	Mr Sanjay	The Institution of		
	Yadav	Engineers (India)		
2.	Dr.Sanjay	a) Optical Society of		
	Mishra	India		
		b) Indian Laser		
		Association		
3.	Dr. Bhupendra	Convener of	Institution of	Chief Editor
	Prakash Sharma	Mechanical	Production	of Int.
		Engineering Society	Engineers	Journal of
				Engineering
				and Science

## 22. Students projects

- a) Percentage of students who have done in-house projects including inter departmental /programme.  $100\ \%$
- b) Percentage of students placed for projects in organization outside the institution i.e. in Research laboratories/Industry/other agencies.

  Nil

## 23. Awards/Recognitions received by faculty and students

Name of Faculty		Awards/Recognition received
Dr. Bhupendra Sharma	Prakash	Received <b>best paper award</b> in the <i>International Conference on Business Intelligence, Analytics, and Knowledge Management (BIAKM-2012)</i> organized by IBS Hyderabad, IFHE University, Dontanapalli, Hyderabad, AP, India. April, 19-20, 2012.
		Received <b>best paper award</b> in the <i>International Conference on Information and Knowledge Management (ICIKM-2012)</i> organized at Lanson Place, Kuala Lumpur, Malaysia during July 24 to 26, 2012.
		Received International Travel Grant from Department of Science and Technology (DST) to attend the IEEE - International Conference on Industrial Engineering and Engineering Management (IEEM-2012) organized at Hong Kong Convention and Exhibition Center, Hong Kong.
		Chaired three technical sessions in the International

	Conferences at SVNIT Surat and CIRT, Bhopal.	
	Delivered Key Note lecture in AICTE sponsored International Conference at CIRT Bhoal.	
Mr. A.K. Tiwari	Gold Medal in M.Tech	
Ms. Farheen Fatima	Best paper award in International conference (MANFEX 2013) held at AMITY University	

## $24. \ List \ of \ eminent \ academic ians \ and \ scientists \ / \ visitors \ to \ the \ department$

Sr. No	Name of the Person	Affiliation	Topic	Date
1	Dr. Giriraj Niyati	Moserbaer India Ltd.	Modern Manufacturing Methods in Electronics Industry	21/05/2011
2	Prof. Abid Haleem	F/O- Engg. & Tech, JMI, New Delhi-25	Green Manufacturing	21/05/2011
3	Prof. Zahid Akhtar Khan	F/O- Engg. & Tech, JMI, New Delhi-25	Ergonomics in work place design	21/05/2011
4	Prof. S. K. Garg	DTU, New Delhi	Just in Time Manufacturing	21/05/2011
5	Prof. S. P. Singh	Department of Management Studies, IIT Delhi	Genetic Algorithm	21/05/2011
6	Mr. Naveen Gupta	Geo Informatics Consultant Pvt. Ltd.	Rapid Prototyping and 3D Printing	21/02/2012
7	Prof. Ajoy Ghatak	IIT Delhi	Laser Systems and applications	27/02/2012
8	Dr. Puneet Tandon	IIITDM, Jabalpur	General Trends in Mechanical Engineering	23/08/2012
9	Mr. Prashant Verma	Denso India Ltd.	Regarding Company Achievements & Placement	18/10/2012
10	Prof. M. M. Hasan	F/O- Engg. & Tech, JMI, New Delhi-25	I.C. Engines: Fuels and Combustion	19/03/2013
11	Prof. A. K. Khare	Ex Pro-Vice Chancelor, UPTU, Lucknow	National Board of Accreditation	7/5/2013
12	Prof. M. Arif	School of Built Environment, University of Salford, U. K.	Innovation through inter- disciplinary research	29/08/2013
13	Prof. R. A. Khan	F/O- Engg. & Tech, JMI, New Delhi-25	Rapid Prototyping and Reverse Engineering	13/09/2013

14	Dr. S. C. Bhaduri	D 1	Engineering Teaching: Next few years	25/01/2014	
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## 25. Seminars/Conferences/Workshops organized and the source of funding

## a) National

S.No.	Academic year	Name of the	Source of funding
		Seminar/conference/Workshop	
1.	2013-14	11 <sup>th</sup> National conference on Industrial Problems on Machine	Financial assistance of Rs. 5,000 from Uttar Pradesh Technical
		and Mechanism (IPRoMM-	University, Lucknow.
		2014)	Chiversity, Edeknow.
			Sponsorship of Rs. 10,000 from
			Le-Logix Design Solution Private
			Limited, Greater Noida.
			Sponsorship of Rs. 20,000 from Indian Institute of Skill Development Private Limited, Gurgaon.
			Financial assistance of Rs. 27,868
			from I.T.S Engineering College
			Greater Noida.
2.	2010-11	Advanced Industrial Engineering	Financial assistance of Rs. 28,940
		(AIE-2011)	from I.T.S Engineering College,
			Greater Noida

**b) International** : Nil

## 26. Students profile programme/course wise:

Name of the	Applications	Selected	Enro	olled	Pass
Course/programme (refer question no. 4)	received		*M	*F	percentage
B.Tech Mechanical Engg.					
2009-13	88	60	57	3	75.44
2008-12	93	60	56	4	85.94
2007-11	85	59	54	5	83.33

\*M= Male \*F= Female

## 27. Diversity of Students

Name of the Course  B.Tech Mechanical Engg.	% of students from the same state	% of students from other States	% of students from abroad
2013-14	43	57	0
2012-13	54	46	0
2011-12	36	64	0

## 28. How many students have cleared national and state competitive examination such as NET, SLET, GATE, Civil services, Defense services etc.?

Year	Name of Examination	No. of Students
2014	GATE 2014	06
	Defense Services	01
2013	GATE	08
2012	GATE	15

## 29. Student progression

Student progression	Against % enrolled
UG to PG	10
PG to M.Phil.	NIL
PG to Ph.D.	NIL
Ph.D. to Post-Doctoral	NIL
Employed	
Campus	20
Other than campus recruitment	70
Entrepreneurship/Self-employment	10

## 30. Details of infrastructure facilities

## a) Library

Number of Books	150
Proceedings of conference	Nil
Journals	11
CDs	Nil
B.Tech Project Report	50

### b) Internet facilities for Staff and Students

Mechanical Engineering Department has CAD/CAM Lab with 35 computers connected with internet facility for students. All staff rooms are equipped with individual internet facilities.

### c) Class rooms with ICT facility

All the class rooms have the provision of internet facility and LCD projector. LCD projector has been installed in one class room and movable LCD projector is used when there is a specific requirement.

### d) Laboratories

S.No.	Name of the Laboratory/ Workshop
1	Central Workshop
2.	Manufacturing Science Lab
3.	Engineering Mechanics Lab
4.	Material Science & Testing Lab
5.	Machine Drawing lab
6.	Thermodynamics Lab
7.	Fluid Mechanics Lab
8.	Measurement & Metrology Lab
9.	Theory of Machine Lab
10.	Refrigeration & air-conditioning Lab
11.	Fluid Machinery Lab
12.	Heat & Mass Transfer Lab
13.	CAD-CAM Lab
14.	I.C.Engines & Automobile Engg. Lab

## 31. Number of students receiving financial assistance from college, university, government or other agencies.

CATEGORY	2013-14	2012-13	2011-12	2010-11
General	458	40	46	49
OBC	67	56	52	46
Minority	10	9	4	
SC	19	24	23	24

32. Details on students enrichment programmes (special lectures/workshops/seminar) with external experts

S.No	Session	Title of the special lecture /workshop / seminar organized	Details of the external expert
1.		11 <sup>th</sup> National conference on Industrial Problems on Machine and Mechanism (IPRoMM-2014)	Prof. S.K.Saha , IIT Delhi Mr. Dinesh Tyagi, Director, International Centre for Automotive Technology, Gurgaon
2	2013-14	Expert talk on Rapid Prototyping and Reverse Engineering	Prof. R. A. Khan, Faculty of Engg. & Tech, Jamia Milia Islamia, New Delhi-25
3		Invited talk on Innovation through inter-disciplinary research	Prof. M. Arif ,School of Built Environment, University of Salford , U. K.
4		Guest lecture on General Trends in Mechanical Engineering	Dr. Puneet Tandon, IIITDM Jabalpur
5	2012-13	Invited talk Regarding Company Achievements & Placement	Mr. Prashant Verma, Denso India Ltd.
6		Guest lecture on I.C. Engines: Fuels and Combustion	Prof. M. M. Hasan, Faculty of Engg. & Tech, Jamia Milia Islamia, New Delhi- 25
7		Expert lecture on Modern Manufacturing Methods in Electronics Industry	Dr. Giriraj Niyati, Moserbaer India Ltd.
8	2011 12	Expert lecture on Green Manufacturing	Prof. Abid Haleem, Faculty of Engg. & Tech, Jamia Milia Islamia, New Delhi-25
9	2011-12	Expert talk on Ergonomics in work place design	Prof. Zahid Akhtar Khan, Faculty of Engg. & Tech, Jamia Milia Islamia, New Delhi-25
10		Invited guest lecture on Just in Time Manufacturing	Prof. S. K. Garg, Delhi Technical University, New

			Delhi
11		Guest lecture on Genetic Algorithm	Prof. S. P. Singh, IIT Delhi
12		Expert lecture on Rapid	Mr. Naveen
		Prototyping and 3D Printing	Gupta, Geo Informatics Consultant Pvt. Ltd.
13		Invited talk on Laser Systems and applications	Prof. Ajoy Ghatak, IIT Delhi
14.		Technical quiz	Departmental
15.		Industrial Visit	Departmental
16.	Others	Personality Development Programme	Mr. C.P.Pandey
17.		Skill Development Programme	Mr.Hitesh Kashyap from Indian Institute of skill Development, Gurgaon

## 33. Teaching methods adopted to improve student learning

- For the subject like Engineering Graphics the concepts are explained with solid models.
- Using PPTs, showing videos, case studies, visit to industries to show the subject related engineering problems.
- Tutorial classes are conducted for enhanced learning.
- Doubt clearing session for weaker students by individual faculty member.
- Subject wise lecture notes are provided by the faculty member.
- Students are encourage to use NPTEL resources for various subjects

## 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Raising awareness and promoting the adoption of **habits and behaviour** by students, faculty, staff, in line with a more sustainable vision of the organization.
- An improvement in the operation of services, equipment and facilities in order to achieve a more rational use of the available resources.
- The promotion and improvement of transparency and accountability within the organization.
- Measurement of water, paper and electricity consumption.

• Improvement in recycling operations: installation of containers for separating and collecting paper, plastics, glass, electronic waste, batteries, ink/toner cartridges, etc.

### 35. SWOC analysis of the department and Future plans

#### **Strengths:**

- Very Good result and placement support
- Qualified and dedicated Faculty
- Excellent Infrastructure and Lab facilities.
- Constant encouragement given for faculty members in pursuing research leading to Ph.D.
- Collaborative effort of faculty members and technical staff members
- Mentors are constantly providing care for students in solving their technical problems.
- Prompt to ensure the excellence of the students by arranging periodical seminars on current technical development.

#### Weakness:

- Lack of adequate industry institute interaction
- Improvement of Consultancy work
- Lack of Inter-disciplinary projects
- Lack of support for International Collaboration.

### **Opportunities:**

- Student participation in club activities, inter college competitions, paper competition, model competition etc.
- Students placement in reputed Private companies/organizations
- Innovation in teaching learning process
- Increase of high quality research publications
- Preparing students for GATE, CAT and other competitive exams and in-house Refresher Course for campus placement.

### **Challenges:**

- Students with diverse background
- Constant changes to technology
- Adapting to changing student expectations
- Patenting the innovative research work carried out in the department.
- Balancing administrative, academic and research work.

## Future plans of the department.

#### **Educational Plan**

- To establish industry / academic interactions or collaborations with Regional /state level/ national / international organizations
- Provide better opportunities for our faculty and students to engage in Professional consultancy services to the government as well as multinational sectors.
- To encourage the students to become entrepreneurs.

## Research plans

- Strengthening of linkages with DST, AICTE, CSIR, BRNS, UGC etc. for financial and non-financial support.
- To have research tie-ups with National and International reputed institutions.
- To take part in resolving the National/International issues and challenges in Engineering.
- To contribute more effort towards relevant research project for the benefit of the society.

## Annexure

## **List of Publications**

## **Publications in Journals**

S. No	Title of paper	Author(s) Names	Name of the Journal	Vol. & Year	Page No.	ISSN
1	Exergetic performance evaluation of solar air heater having arc shape oriented protrusions as roughness element	Sanjay Yadav, Maneesh Kaushal, Varun Goel Siddhartha Vashishtha	Solar Energy	105, July 2014	181-189	0038- 092X
2	Nusselt number and friction factor correlations for solar air heater duct having protrusions as roughness elements on absorber plate	Sanjay Yadav, Varun, Siddhartha M.Kaushal	Experimental Thermal and Fluid Science	44 2012	34-41	0894- 1777
3	Heat Transfer and Frictional Characteristics of Rectangular Channel Air Duct Having Protrusion as Roughness Elements	Sanjay Yadav, Varun, Siddhartha and M.Kaushal	Journal of The Institution of Engineers (India): Series C	93 (4), 2012.	307-312	2250- 0545
4	Experimental Investigation of Centrifugal Pump working as Turbine for Small Hydropower Systems	Himanshu Nautiyal,Varun, Anoop Kumar and Sanjay Yadav	Energy Science and Technology	1 (1)	79-86.	1923- 8460
5.	Modeling of Hole Taper and Heat Affected Zone due to Laser Beam Percussion Drilling	Sanjay Mishra Vinod Yadava	Machining Science and Technology	17 ( 2) August 2012		1091- 0344
6.	Modeling and Optimization of Laser Beam Percussion Drilling of Thin Aluminium Sheet	Sanjay Mishra Vinod Yadava	Optics and Laser Technology	48 October 2012		0030- 3992
7.	Prediction of Hole characteristics and hole Productivity during Pulsed Nd:YAG Laser Beam Percussion Drilling	Sanjay Mishra Vinod Yadava	Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture	227(4) November 2012		0954- 4054
9.	Finite Element (FE) Simulation to investigate the effect of sheet thickness on Hole Taper and Heat Affected Zone (HAZ) during Laser Beam Percussion Drilling of Thin Aluminium Sheet	Sanjay Mishra Vinod Yadava	Lasers in Engineering	Accepted December 2012		0898- 1507 (print) 1029- 029X (online )
10.	Modeling and Optimization of Laser Beam Percussion Drilling of Nickel-based Superalloy Sheet using Nd:	Sanjay Mishra Vinod Yadava	Optics and Lasers in Engineering	51 January 2013		0143- 8166

11	Finite Element Prediction of Hole Characteristics and Material Removal Rate due to Laser Beam Percussion Drilling	Sanjay Mishra Vinod Yadava	Lasers in Engineering	Accepted November 2013	
12	Implementing lean manufacturing with cellular layout: a case study	L.N. Pattanaik, B. P.Sharma	International Journal of Advanced Manufacturing Technology	42, No. (7-8) 2009	772-779
13	Knowledge Sharing Barriers: An approach of Interpretive Structural Modeling (ISM)	B.P.Sharma, M.D.Singh Neha	Information System & Economics e-journal	4(11) 2012.	
14	Modeling the Knowledge Sharing Barriers: An ISM approach	B.P.Sharma, M.D.Singh	International Journal of Knowledge–Based Organizations	5(2) 2013.	
15	Modeling the Metrics of Knowledge-Sharing Barriers: An Analytical Network Process Approach	B.P.Sharma, M.D.Singh R. Kant	International Journal of Logistics Systems and Management	9(14), 2012	36-47.
16	Modeling the Metrics of Individual, Organizational and Technological Knowledge Sharing Barriers: An ANP approach	B.P.Sharma, M.D.Singh	International Journal of Information and Knowledge Management.	12(3), 2013	1-15.
17	Modeling the Individual/Group Knowledge Sharing Barriers in the Indian Engineering Industries: An Integrated Approach of ISM, AHP and Similarity Coefficient"	B.P.Sharma, M.D.Singh	International Journal of Management Science and Engineering Management.	8(3), 2013	179-198.
18	Modeling the Hierarchy of Individual Knowledge Sharing Barriers using Structural Equation modeling approach	B.P.Sharma, M.D.Singh	International Journal of Logistics Systems and Management	18(2) 2013	79-91.
19	Modeling the Hierarchy of Organizational Knowledge Sharing Barriers: An approach of Structural Equation modeling	B.P.Sharma, M.D.Singh	International Journal of Knowledge Management	7(3) 2013	17-26.
20	Modeling of Technological Knowledge Sharing Barriers using Structural Equation modeling approach	B.P.Sharma, M.D.Singh	International Journal of Knowledge–Based Organizations	5 (1)	39-52.
21	Exergy Analysis of Combined Cycle Power Plant: NTPC	A.K.Tiwari, M.M.Hasan and Mohd. Islam	International Journal of Thermodynamics	16(1), 2013.	36-42,

	Dadri, India,				
22	Effect of Ambient Temperature on the Performance of a Combined Cycle Power Plant,	A.K.Tiwari, M.M.Hasan and Mohd. Islam	Transactions of the Canadian Society for Mechanical Engineering	37(4) 2013.	1177-1188
23	Lean and Green Manufacturing: A Recent Trend in Manufacturing Industry,	Suresh Prasad and S.K.Sharma	International Journal of Mechanical Engineering and Research	3 (6)	457-460.
24	Lean and Green Manufacturing: Concept and its implementation in operation management,	Suresh Prasad S.K.Sharma	International Journal of Advance Manufacturing,	4(5)	463-472.
25	Product Innovation: Utility Analysis Using SEM for an Adaptive Business Model,	Md. K.A. Khan, Abid Haleem and Mohd. Arif	Global Sci-Tech	5 (4)	230-239.
26	Prediction of Hole Radius and Material Removal Rate due to Single Pulse Laser Beam Drilling using Finite Element Method,	Sanjay Mishra Vinod Yadava	Journal of Engineering and Technology Education	6(1) 2012.	30-34
27	Modeling of Knowledge Management Technologies in the Indian Engineering Industries: An Interpretive Structural Modeling Approach.	A. K.Singh, M. D.Singh B. P.Sharma	The IUP Journal of Knowledge Management	11(3), (2013.	49-57

## **Publication in Conferences**

S. No	Title of paper	Author(s) Names	Name of the Conference	Venue	Year
1.	Cellular Manufacturing: A Review of different Group Technology Approaches	Sanjay Yadav	National Convention of Mechanical Engineers	The Institution of Engineers (India), Delhi State Centre.	6-7 Nov. 2009
2	A Mathematical model to solve large facility layout problems using Group Technology	Sanjay Yadav P.K.Mishra	National Conference on advances in Mechanical Engineering (NCAME- 2009)	Moradabad Institute of Technology	28 <sup>th</sup> Feb & 1 <sup>st</sup> March 2009.
3	Comparison of Inter-Cell flow Reduction Heuristics for a Manufacturing Cell System	Sanjay Yadav P.K.Mishra	National Conference on State of the Art Technologies in Mechanical Engineering (STEM-2007)	G.B. Pant University of Agriculture & Technology Pantnagar	29-31 October2007
4	Comparative Analysis of the effect of Thermophysical Properties on the Geometrical and Metallurgical aspects of Nd: YAG Laser Drilled micro-hole		8 <sup>th</sup> International Conference on Precision, Meso, Micro and Nano Engineering (COPEN-8:2013) at	National Institute of Technology (NIT) Calicut Kerala,	13-15, Decemeber 2013
5	FEM Modeling of Laser Beam Percussion Drilling of Aluminium	Sanjay Mishra and Vinod Yadava	7 <sup>th</sup> International Conference on Precision, Meso, Micro and Nano Engineering (COPEN-7:2011),	College of Engineering Pune	10-11 Decemeber 2011,
6	Finite Element Analysis of Laser Beam Bending of Ultra thin aluminium foil	Smita Gupta, Vinod Yadava, Sanjay Mishra Amit Sharma	7 <sup>th</sup> International Conference on Precision, Meso, Micro and Nano Engineering (COPEN-7:2011),	College of Engineering Pune	10-11 Decemeber 2011,
7	3D Transient Finite Element Analysis of Laser Percussion Drilling of Thin Sheet Metal	Salim Mohd, Vinod Yadava, Sanjay Mishra and Amit Sharma	3 <sup>rd</sup> International and 24 <sup>th</sup> All India Manufacturing Technology, Design and Research (AIMTDR)	Andhra University, Visakhapatnam	13-15 December 2010
8	A Review of Laser Micro- Drilling	Sanjay Mishra, Vinod Yadava and Avanish Kumar Dubey	Proceedings of the 2 <sup>nd</sup> International Conference on Production and Industrial Engineering (CPIE),	NIT Jalandhar,	3-5 December 2010
9	Imprayers Fin Surface I.T.S Quality with Solid Lubrication in Turning AISI	Sanjay Wishra ENGLNEERING CO Agarwal	LPECE GREATER NOIDA International Conference on Leading	, <b>Grp</b> duate <b>Pa</b> School of Engineering,	3-4 December 92073

	4340 steel		Edge Manufacturing in 21st Century	Osaka University (Sponsored by The Japan Society of Mechanical Engineers (JSME)	
10	Modeling the Metrics of Knowledge Sharing Barriers: An ANP approach	B. P.Sharma M. D.Singh R.Kant	International Conference on Industrial Engineering (ICIE-2011),	SVNIT, Surat, India.,	19,November2 011
11	Knowledge Sharing Barriers: An approach of Interpretive Structural Modeling (ISM)	B. P.Sharma M. D.Singh Neha	International Conference on Business Intelligence, Analytics, and Knowledge Management (BIAKM- 2012)	IBS Hyderabad, Hyderabad, AP, India.	19-20, April 2012.
12	Modeling the Knowledge Sharing Barriers using An ISM approach	B. P.Sharma M. D.Singh Neha	International Conference on Information and Knowledge Management (ICIKM 2012)	Lanson Place, Kuala Lumpur, Malaysia	July 24 – 26 July 2012.
13	Knowledge Sharing Barriers: An Integrated approach of ISM and AHP	B. P.Sharma M. D.Singh A.Kumar	International Conference on Information and Knowledge Management (ICIKM 2012).	IACSIT Press, Singapore.	2012
14	Critical Knowledge Sharing Barriers: An Interpretive Structural Modeling approach	B. P.Sharma M. D.Singh	The IEEE International Conference on Industrial Engineering and Engineering Management IEEM – 2012,		10- 13 December 2012
15	Modeling of Knowledge Management Technologies in the Indian Engineering Industries: An Interpretive Structural Modeling approach	B. P.Sharma A.K.Singh M. D.Singh	International conference of Business Intelligence, Analytics and Knowledge Management (BIAKM- 2012).	IBS Hyderabad, India	2013
16	Organizational Knowledge Sharing Barriers in the Indian Engineering Industries: An ISM approach	U. A.Khan M. D.Singh B. P.Sharma	International Conference on Industrial Engineering (ICIE-2013)	SVNIT, Surat, India	2013

17	Knowledge Management Implementation enablers in the Indian Engineering Industries: An ISM approach	A.,Ahmad M. D.Singh B. P.Sharma	International Conference on Industrial Engineering (ICIE-2013)	SVNIT, Surat, India.	2013
18	Knowledge Management Implementation enablers in the Indian Engineering Industries: An ISM approach	K. K., Shukla M. D.Singh B. P. Sharma	International Conference on Industrial Engineering (ICIE-2013)	SVNIT, Surat, India.	2013
19	Lean and Green Manufacturing: Concept and its Implementation in Operations Management	S. Prasad S. K.,Sharma	Innovative Trends in Mechanical, Material, Manufacturing, Automotive, Automobile and Aeronautical Engineering (ITMMMAAAE-2014)	Krishi Sanskrit, Jawaharlal Nehru University, New Delhi-	15-16 February, 2014
20	Ergonomics in Car Seat Design: Comfort Analysis for Indian Customers	Khan, Md. K. A	11 <sup>th</sup> National Conference on Industrial Problems on Machines and Mechanisms, IPRoMM- 2014	I.T.S Engineering College, Greater Noida	26-27, February 2014
21	Design Analysis of Passive Hydraulic Dampers	Dushyant Mishra	11 <sup>th</sup> National Conference on Industrial Problems on Machines and Mechanisms, IPRoMM- 2014	I.T.S Engineering College, Greater Noida	26-27, February 2014
22	Motion Control Scheme for Industrial Mobile Agent using the Bezier Curve	Manvendra Yadav, Sanjay Yadav, Sanjay Mishra,	11 <sup>th</sup> National Conference on Industrial Problems on Machines and Mechanisms, IPRoMM- 2014	I.T.S Engineering College, Greater Noida	26-27, February 2014
23	Design and Analysis of an Adaptive Finger Mechanism for a Hand in Industrial Application	S. S.Chauhan S. C.Bhaduri	11 <sup>th</sup> National Conference on Industrial Problems on Machines and Mechanisms, IPRoMM- 2014	I.T.S Engineering College, Greater Noida	26-27, February 2014
24	Thermodynamic Performance Analysis of a Combined Cycle Power Plant with Variation in Ambient Temperature	A K, Tiwari M M Hasan Mohd. Islam	ISTE Delhi Section Convention	Delhi Technological University, New Delhi	5-6 September, 2013
25	Kinematic Design And Development Of Two Phalanx Under Actuated Fingers	S.S. Chauhan S C Bhaduri	ISTE Delhi Section Convention	Delhi Technological University, New Delhi	5-6 September, 2013

26 27	GSCM: Generating ISM Model of CSFs for Utility Theory Manually operated designed	Md. K A,Khan Abid Haleem Mohd., Arif S. S.Chauhan	National Conference on Excellence in Technology (NCENT) MANFEX-2013,	IIMT College of Engineering, Greater Noida AMITY	31 <sup>st</sup> August 2013 30-31 <sup>st</sup>
	mechanism for stair- climbing wheel chair	Avantilka,	International Conf.,	University Noida.	May 2013,
28	Optimization of EDM characteristics for Al-SiC <sub>p</sub> Composite using Grey Relational Analysis	Fatima, Farheen	MANFEX-2013, International Conf.,	AMITY University Noida.	30-31 <sup>st</sup> May 2013,
29	Prediction of Hole Radius and Material Removal Rate due to Single Pulse Laser Drilling using Finite Element Method	Sanjay Mishra Vinod Yadava,	National Conference on Advances in Manufacturing Technology	NITTTR Chandigarh,	15-16 March 2012
30	Experimental Study of laser Percussion Drilling-A Review	Sanjay Mishra, Vinod Yadava Avanish Kumar Dubey	National Conference on Recent Advances in Manufacturing (RAM),	SVNIT, Surat	19-21 July 2010
31	Strategic siting and roofing area required for photo voltaic cell in the rural areas	B. P.Sharma	National Conference on Renewal Energy Resources	BBSCET, Allahabad	2008
32	Study of Lean and Green Manufacturing: A Literature Review	Suresh Prasad S.K.Sharma	National Conference on Advances in Manufacturing Technology	NITTTR Chandigarh,	15-16 March 2012
33	Lean and Green Manufacturing: Recent trend in operation and supply chain management	Suresh Prasad S.K.Sharma	National Conference on Recent trend in operation and supply chain management	Gautam Buddha University, Greater Noida	4 August 2012

## 3. Evaluative Report of the Department

1. Name of the department: Master of Business Administration (MBA)

2. Year of Establishment: 2009

3. Names of Programmes / Courses offered: Post Graduate /MBA

4. Names of Interdisciplinary courses and the departments/units involved

S.No.	<b>Subject Code</b>	Subject name	Other
			Department
1	MB 127	Business Communication & MIS	B Tech (IT)
2	MB 123	Operations Research	Applied Science

- 5. **Annual/ semester/choice based credit system (programme wise)** Semester based credit system
- 6. Participation of the department in the courses offered by other departments: Yes.

The department actively participates in teaching learning process of other departments as and when required. The details are as under-

S.No.	Subject Code	Subject name	Department
1	AS902	Research Methodology	M.Tech
2	EHU 601	Industrial Management	B. Tech CS & IT
3	EHU 501	Engineering and Managerial Economics	B. Tech CS & IT
4	HU 401	Human Behavior	B. Tech ECE

7. Courses in collaboration with other universities, industries, foreign institutions, etc.

Nil

8. Details of courses/programmes discontinued (if any) with reasons:

Nil

## 9. Number of teaching posts

Designation	Sanctioned	Filled
Professors	1	0
Associate Professors	2	0
Asst. Professors	9	5

# 10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No of years of Experience	No of Ph.D. students guided for the last 4 Years
Ankur Srivastava	M.Com, PGDM	Assistant professor	Finance	17	NIL
L. K Verma	PGDBM, B Tech, MIE(I),AMIETE	Assistant professor	HR	44	NIL
Himani Goswami Sharma	MBA	Assistant professor	HR	13	NIL
Neelam Sheoliha	PGDBM, MMM	Assistant professor	Marketing	12	NIL
Anuja Shukla	MBA, MA Economics, UGC NET	Assistant professor	Marketing, Retail	4	NIL
Meenakshi Srivastav	MBA, M.Sc	Assistant professor	Marketing, IB	6	NIL

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: Nil

13. Student - Teacher Ratio (programme wise): 15:1

- 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: Nil
- 15. Qualifications of teaching faculty with D.Sc/ D.Litt/ Ph.D/ MPhil / PG.

Post Graduate- 7

- 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil
- 17. Departmental projects funded by DST FIST; UGC, DBT, ICSSR, etc. and total grants received: Nil
- 18. Research Centre /facility recognized by the University: Nil
- 19. Publications:
- \* a) Publication per faculty: See Annexure for details of publications.

	2011-12			2012-13			2013-14								
Name of Faculty	Paper Pub	Paper presented	Sem/Conf/ Workshop/ FDP attended	Award recognition	Others	Paper Pub	Paper presented	Sem/ Conf/ Workshop/ FDP attended	Award recognition	Others	Paper Pub	Paper presented	Sem/ Conf/ Workshop/ FDP attended	Award recognition	Others
Ankur Srivastava	2	1	1	1	1	1	-	2	-	1	4	1	2	-	1
L. K Verma	1	1	-	1	1	-	-	2	-	-	-	-	1	-	1
Himani Goswami S.	-	-	1	1	-	1	-	2	-	-	2	2	2	-	1
Neelam Sheoliha	-	1	1	1	-	-	-	2	-	1	1	3	2	-	1
Anuja Shukla	-	-	2	1	-	1	1	4	1	1	1	2	1	1	1

- 20. Areas of consultancy and income generated: NIL
- 21. Faculty as members in a) National committees b) International Committees c) Editorial Board

**NIL** 

### 22. Student projects

# a) Percentage of students who have done in-house projects including inter departmental/programme:

100%. All students joining MBA programme have to prepare a Dissertation report in 4<sup>th</sup> semester as a part of University Curriculum.

# b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies.

100 %. All students have to under go a Summer Training Project for 8 weeks in Industry in between  $2^{nd}$  semester and  $3^{rd}$  Semester.

## 23. Awards / Recognitions received by faculty and students: Nil

#### 24. List of eminent academicians and scientists / visitors to the department

- 23. Mr Anupam Mishra- GM Marketing, State Trading Corporation India Ltd.
- 24. Mr. Nishant Maheshwari-Director, Neotric Business Solution.
- 25. Mr. Anil Girotra, Ex ED, Andhra Bank.
- 26. Mr. Sameer Kapoor, Founder Simply Paisa.com, SVP Rligare.
- 27. Mr. Pramod Kumar, Director Make India Smart Pvt. Ltd. and Ex GM PNB.
- 28. Mr. Sumit Shivlisa, Senior Associate, F& A, I Gate Solutions Ltd.
- 29. Mr. Sushant Agarwal, Manager Finance & Accounts, C & S Electric Ltd.
- 30. Mr. Sunil Gupta, FCA, Partner Nitin Mittal and Company.
- 31. Mr Marc Ragsdale, President, Prospus Consulting Pvt Ltd.
- 32. Mr Sunil Kesharwani, Renowned World Famous Motivator of Corporate World.
- 33. Mr S.K.Mukherjee, Group Director, JK Organisation.
- 34. Mr. Rohit Singh, Chairman and MD, Indian Development Finance Corp Ltd.
- 35. Mr. Mr Pankaj Agarwal, MD, Headstrom.
- 36. Mr Sachin Dhamija, GM Project, DTDC Logistics Ltd.
- 37. Mr Vijay Raghunathan (Chief Guest), President, American Express.
- 38. Mr Kapil Kaul, Advisor, Election Commission of India.
- 39. Dr Anoop Pant, Director, Accurate Inst of Mgmt.
- 40. Dr SP Singh, Director, INJ Business School.
- 41. Varun Mehrotra, Director, Institute of Financial Studies.
- 42. Mr. Anjan K Putatunda, RSM South and North Kawneer India (Division of Alcoa Indian Pvt Ltd.).
- 43. Mr Shushant Agarwal, DGM-Finance, C&S Electric Ltd.
- 44. Mr Rakesh Sharma, Head-HR & Adm, Motherson Sumi Infotech& designs Ltd.

## 25. Seminars/ Conferences/Workshops organized & the source of funding

## a) National:

## Year 2013-14

AICTE sponsored National Seminar on "Scope of Financial Services and	Partially Funded by
their Importance in Management Education" on 30 August 2013 at ITS	AICTE
Engg College Gr. Noida	

## Year 2012-13

AICTE Sponsored National Seminar on "Managing Challenges in HRM	Partially Funded by
in Industrial Sector after Globalization" on October 5th, 2012 at ITS	AICTE
Engg. College Gr. Noida	

## **Year 2011-12**

Attended Sponsored National Conference on "Managing Challenges in	Partially Funded
Service Marketing" on 27 March 2012, at ITS Engg. College Gr. Noida	by
	AICTE

## b) International: Nil

## 26. Student profile programme/course wise:

Name of the Course	Applications received	Selected	Enrolled		Pass %
(MBA)	received		M	F	
2011-12	92	60	41	19	92.98
2012-13	82	59	45	14	96
2013-14	76	57	48	9	92.16

<sup>\*</sup>M = Male \*F = Female

## 27. Diversity of Students

Name of The course (MBA)	% of student from same state	% of students from other states	% of students from abroad
2011-12	32	68	NIL
2012-13	56	44	NIL
2013-14	52	48	NIL

# 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

NIL

## 29. Student progression

Student progression	Against % enrolled
UG to PG	N/A
PG to M.Phil.	N/A
PG to Ph.D.	N/A
Ph.D. to Post-Doctoral	N/A
Campus selection	2013-14
Other than campus recruitment	<ul><li>Campus 26</li><li>Non Campus</li></ul>
Entrepreneurship/Self-employment	2011-12 01
	2012-13 02
	2013-14 04

### 30. Details of Infrastructural facilities

### a) Library

The Institute provides Book Bank for the subjects allocated from the University. Also many referral books are available in the Library related to the course curriculum and other varied areas of research. Library subscribes to Journals of National and International repute. Students can avail the facility of reading them in their allotted Library period.

Number of Books	150
Proceedings of conference	Nil
Journals	29
CDs	Nil

#### b) Internet facilities for Staff & Students

Yes. Faculty is provided with individual computer system with internet facility in their cabins. The campus including hostels is wi-fi enabled so that the students can avail 24x7 internet facilities. Also Students can avail the internet facility in Library, computer labs etc.

### c) Class rooms with ICT facility

MBA Classrooms are equipped with fully functional LCD Projectors. The class rooms are furnished with elevated seating pattern for students enabling clear visibility of the white board and interaction with faculty. Each class has dais and podium for the Teachers.

#### d) Laboratories

Computer Laboratory has been allotted for making assignments and projects for students.

# 31. Number of students receiving financial assistance from college, university, government or other agencies.

CATEGORY	2013-14	2012-13	2011-12	2010-11
General	7	19	15	17
OBC	4	9	12	25
Minority	4	6	0	-
SC	2	7	3	1

# **32.** Details on student enrichment programmes (special lectures / workshops /seminar) with external experts.

The following programmes have been organized by department in the last three years.

**Session: 2013-14** 

Sl.		Name of guest		
No	Date	speaker	Designation	Company
1	Oct	Mr Anupam Mishra	GM	State Trading Corporation India Ltd
	13			
2	Aug-	Mr. Nishant	Director	Neotric Business Solution
	13	Maheshwari		

AICTE sponsored National Seminar	30.08.2014	"Scope of Financial Services and their Importance in Management Education"
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**Session: 2012-13** 

Sl.	Date	Name of guest	Designation	Company
No		speaker		
1	28/9/12	Mr. Anjan K	RSM - South	Kawneer India (Division of Alcoa
		Putatunda	and North	Indian Pvt Ltd.)
2	5/9/2012	Mr Shushant Agarwal	DGM-	C&S Electric Ltd.
			Finance	
3	19/9/12	Mr Marc Ragsdale	President	Prospus Consulting Pvt Ltd
4	31/8/12	Mr Rakesh Sharma	Head-HR &	Motherson Sumi Infotech& designs
			Adm	Ltd

**Session: 2011-12** 

		Name of Guest	Designation	Company	Topic	
S.No.	Date	Speaker	Designation	Company		
1	27/9/2011	Mr S.K.Mukherjee	Group Director	JK Organisation	Strategic Business	
					Plan	
2	11/1/2012	Mr. Rohit Singh	Chairman and	Indian Development	Finance Planning	
			MD	Finance Corp Ltd		
3	20/1/2012	Mr. Rohit Singh	Chairman and	Indian Development	Wealth	
			MD	Finance Corp Ltd	Management	
4	27/1/2012	Mr Marc Ragsdale	President	Prospus Consulting Pvt	Business Prospects	
				Ltd	in US	
5	23/2/2012	Mr Marc Ragsdale	President	Prospus Consulting Pvt	Challenges before	
				Ltd	Indian	
					Entrepreneur in	
					US	
6	7/2/2012	Mr Pankaj Agarwal	MD	Headstrom	Importance of PDP	
					for Management	
					studies	
7	2/3/2012	Mr Sachin Dhamija	GM Project	DTDC Logistics Ltd	Supply Chain	
					Management	

#### 33. Teaching methods adopted to improve student learning

- Comprehensive lesson plans are made based on the syllabus of the subject by each faculty.
- Every teacher prepares a period wise plan for the entire course indicating therein as to the topic that will be covered along with reference pages of the reference materials for each of the 40-45 clsses of his/her subjects.
- A variety by way of caselets, management related stories, management phrages& related
  incidents from industries are brought out, so that the subjects becomes interesting &
  uptodate for the students and thus motivates them attend classes.
- While teaching the teacher normally does not sit down& teach or give dictation from the note /book. Slides only show heading& sub heading.
- Weekly Time Table is made & followed meticulously. The class room is never without a teacher
- case studies related to topics in the industries are discussed in the class room
- On completion of a Unit an assignments is given to the students preferably on Thursday or Friday so that the students submits the completed assignment on Monday morning
- A class test is also conducted on completion of each Unit
- Separate tutorials periods are marked for the subjects having numerical in the syllabus
- Real life examples including that of Industries are discussed in the class.
- Students are encouraged &asked to clear their doubts.
- Based on the performance of I sessional (Which normally includes 2 out of total of 5 units) weak students as well as strong students are identified
- Weak students are
  - o given counseling
  - o advice individual motivational & encouragement treatment
  - o extra classes conducted to clear their doubt further and revise the topics
  - o close monitoring is done to ensure progress
- A separate interview is conducted by the HOD for the weak students to know their problems and help them out
- Strong students are- further motivated & encouragements are given to boost their performance

- In between the strong & weak students- Performance improvement awards are given to the students
- Extensive use of PPT s are done
- Every class room is fitted with LCD
- Regular interaction with the students

## 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- On 7<sup>th</sup> November, on the occasion of National Education Day, the students & faculties participated in teaching the children residing near by slum areas.
- The children were explained about importance of cleanliness& hygiene etc.
- Books, Slates, and copies were distributed to the children.

## 35. SWOC analysis of the department and Future plans

#### > Strength

The strengths portion of the SWOT analysis is used to determine what our Dept/ business does best. If we know our Dept's strengths we can place emphasis on them when the time comes to implement our Dept's program. For instance, if we know that our infrastructure or placement is better than anyone else in this field then, we can list that as a strength. We do not need to be the best in the industry at something to list it as strength -- Further our strengths are based on internal and external performance.

## Our Strength:-

- \*Good infrastructure
- \* Good pass percentage
- \*Highly qualified Faculty with sound industry exposure.
- \*Pollution free environment
- \*Hostel facility
- \*Provision of Staff Quarter for the faculty
- \*Transportation Facility available from far flung areas around Greater Noida.

#### Weakness

Knowing our department's weaknesses is critical to SWOT analysis. Anything that our Department struggles with or lacks is considered a weakness. For instance, limited faculties with industries experience, no proper placement is a weakness. If we know our Departments

weaknesses, we can avoid centering a marketing and advertising strategy on those weaknesses.

#### **Our Weakness:**

- \* Not achieving Placement target
- \*Good quality of students not coming

## > Opportunity

Opportunities are emerging scenarios where by our Department can grow and succeed with a new or existing product. An opportunity might be an underserved market, a newly emerging technology or anything that can add to our Dept/ business. For instance, if we own a technology business that installs high-speed Internet infrastructure, a developing country might offer many opportunities for your business to expand and grow, eventually becoming the leader in technology services. If we know the opportunities facing our Dept/ business, we can focus our strategy and resources to achieve specific goals.

## Our opportunities are-

- To provide better placement opportunities to the students.
- To arrange for more Guest Lecture
- To conduct more seminar/workshop
- To provide more industry interaction through industrial visits etc.
- To encourage industry oriented research work.
- To start certificate courses/ training programmes that help in placement.

### Challenges

The threats, or challenges, faced by our Department when implementing a program are perhaps the most important factors of a SWOT analysis. We might have a solid departmental plan catered to a clear and specific set of strengths, weaknesses and opportunities, but if we do not consider the challenges in our field, our plan could be useless. Knowing the challenges we face helps our Dept to make informed and strategic decisions regarding various things.

### **Our Challenges & threats**

- To come with in top 10 of university merit list
- To have fully AC class rooms

- To start industry oriented research programs.
- Providing more variety of specialized courses like Management of International games, wedding management, hospital management, traffic management etc
- To provide incentive to teachers doing research oriented work.
- To have more interaction with socially weaker section of society.

## Annexure List of Publication in Journals

S. No	Title of paper	Author(s) Names	Name of the Journal	Vol. & Year	Page No.	ISSN
1	Women education in India in Rural Sector	LK Verma	International Journal for Transformation in Business Management (IJTMB)	1(1), 2011		
2	Need of the hour for the Corporate world–Employee empowerment	LK Verma	Centre for Management Development (CMD) Moody Nagar	4(1) 2012		
3	Restructuring Management Education Today for better tomorrow	Neelam Sheoliha	Zenith International Journal of Multidisciplinary Research	2(2) February 2012		2231 5780,
4	A Study of Changing Consumer Behaviour towards Convenience stores by entrance of malls in India	Anuja Shukla	Zenith International Journal of Business Economics & Management Research,	3 (4), 2013		2249- 8826
5.	Forecasting Performances of GARCH Families of Models	Ankur Srivastava	Apeejay- Journal of Management Sciences And Technology,Oct 2013	2013		
6.	Are Garch Specifications Superior Among Garch Types Of Models In Estimating Financial Volatility? An Experiment	Ankur Srivastava	Apeejay- Journal of Management science and technology	2014		2347- 5005 23
7.	Estimating Volatility In Crude Oil Futures Market With Asymetric Garch Specifications	Ankur Srivastava	Asian Journal of Research in Business Economics & Management,	4(6) 2014		2250- 1673- 73
8.	Forecasting Capital Market Volatility: A Comparison among GARCH Families of Models	Ankur Srivastava	FINANCE INDIA June 2015 (Volume XXIX No. 2)			
9.	Consumer awareness on E-banking-An empirical study in Ghaziabad District	Pinki Singh Sheetal Rani	International Journal of Management and Technology Research, 3(1): 51-54(2014) ISSN: 2277-291X,			

## **List of Publication in Conferences**

S. No	Title of paper	Author(s) Names	Name of the Conference	Venue	Year
1.	Creating new Opportunities in Rural India	Anuja Shukla	National conference held at Rama Institute of Engg. and Technology		2010
2	Critical Analysis of Viral Marketing Case – Why this Kolaveri Di (Viral Fever of India)	Anuja Shukla	Redefine, Reimagine, Reinvent: Roadmap for New Age Marketing, held at	ITSIM Greater Noida	14-15 Decem ber 2013
3	Go Viral on Social Media with Applied Memetics	Anuja Shukla	International Conference on Emerging Trends in Global Management Practices	Symbiosis Centre for Management Studies, Noida	7-8 March 2014
4	Examining the superiority of garch (p, q) specifications over garch type of specifications	Ankur Saxena	The International Conference On Emerging Trends in Global Management Practices – An Interdisciplinary	Symbiosis Centre for Management Studies NOIDA (Constituent of Symbiosis International University, Pune, India)	7-8 March, 2014
5	Go Viral On Social Media With Applied Memetics	Anuja Shukla	The International Conference On Emerging Trends in Global Management Practices – An Interdisciplinary	Symbiosis Centre for Management Studies NOIDA (Constituent of Symbiosis International University, Pune, India)	7-8 March, 2014
6	Issues And Challenges In Connecting The Virtual Workforce	Himani Goswami	The International Conference On Emerging Trends In Global Management Practices – An Interdisciplinary Approach	Symbiosis Centre for Management Studies NOIDA (Constituent of Symbiosis International University, Pune, India)	7-8 March, 2014,
7	Branding Globally & Acting Globally (The Glocal Strategy Of The Global Brands)	Neelam Sheoliha	The International Conference On Emerging Trends In Global Management Practices – An Interdisciplinary Approach	Symbiosis Centre for Management Studies NOIDA (Constituent of Symbiosis International University, Pune, India)	7-8 March, 2014

Railways - A Brief Study of confer		
Kanways - 11 Direct Study of Control	rence on Data Faridabad	2014
Delhi and NCR Acqui	sition, Transfer	
procee	eding and Mgmt	

## **Post-accreditation Initiatives**

If the college has already undergone the accreditation process by NAAC, please highlight the significant quality sustenance and enhancement measures undertaken during the last four years. The narrative may not exceed ten pages. (Refer section IX of Guidelines for Assessment and Accreditation)

## **Declaration by the Head of the Institution**

I certify that the data included in this Self-study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

Signature of the Head of the institution
with seal:

Place:

Date: