

## Evaluative Report of the Departments

1. **Name of the department** : Information Technology

2. **Year of Establishment** : 2008

3. **Names of Programmes** :

U.G.	B.Tech
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4. **Names of Interdisciplinary courses and the departments/units involved :**

FCPIT – CSE,ECE,ME,CIVIL

MP – CSE,ECE

DCLD – CSE,ECE

DS – CSE,ECE

HRM – CSE,MBA,ME

CN I – CSE

OOPS – CSE,ECE

5. **Annual/ semester/choice based credit system (programme wise) :**

B.Tech : Semester system

6. **Participation of the department in the courses offered by other departments :**

Name of Program	Department
M.tech (UML,DS,Compiler,ACA,PAC)	CSE
B.tech (OOPs,DS)	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**

	Sanctioned	Filled
Professors	1	1
Associate Professors	3	3
Asst. Professors	12	12

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)**

S.no	Name	Qualification	Designation	Specialization	No. of	No. of
					of	Ph.D./M.Tech.Students
1	Dr. Satinder Pal	MA, Ph.D	Professor	Modern Algebra & Real	33	
2	Er. Mandeep Kaur	M.Tech.	Associate Prof.	Image Processing	7	Nil

3	Mr Charanjit Singh	M. Sc. (Maths),	Associate Prof.	Applied Mathematics	11	
4	Dr. Ravinder singh	M.Sc, Ph.D	Associate Prof.		9	
5	Er. Richa Sharma	M.Tech.	Assistant Prof	Networking	7	Nil
6	Er. Navjot	M.Tech.	Assistant	Networking	3	Nil
7	Ms. Inderjot	MA,	Assistant	Linguistics		Nil
8	Er. Prabhjit Singh	M.Tech.	Assistant Prof	Image Processing	5	Nil
9	Ms. Dewandeep	M.Sc. (Chem)	Assistant Prof		3	Nil
10	Er. Priya Kapoor	M.Tech.	Assistant Prof	Image Processing	2	Nil
11	Ms. Karamjit Kaur	M.Sc. (Chem)	Assistant Prof			Nil
12	Er. Jasjit Kaur	M.Tech.	Assistant Prof.	Cloud Computing	1	Nil
13	Er. Vikas	M.Tech	Asstt.Prof.	Networking	2	Nil
14	Er. Jasmeet Singh	M.Tech	Asstt.Prof.	Image Processing	1	Nil
15	Er. Sandeep Kaur	M.Tech	Asstt.Prof.	Image Processing	2	Nil
16	Mr. Munish Kumar	M. Sc. (Maths)	Assistant Prof	Applied Mathematics	7	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)**

<b>COURSE</b>	<b>STUDENT TEACHER RATIO</b>
Total No. of students	85
Total No. of Faculty	6
Ratio	1:15

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:**

	Sanctioned	Filled
Technical Staff	5	5
Administrative Staff	1	1

**15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.**

No. of Faculty with Ph.D	0
No. of Faculty with M.Tech	6
No. of Faculty with B.Tech	0

**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

Name of Faculty	International Journal	National Journal
Er.Mandeep Kaur	10	Nil
Er.Richa Sharma	5	Nil
Er.Navjot Kaur	3	Nil
Er.Prabhjit Singh	NIL	2
Er.Priya Kapoor	9	Nil
Er.Jasjit Kaur	1	Nil

**(Refer Annexure 1)**

\*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.) NIL

\* Monographs: NIL

\* Chapter in Books: NIL

\* Books Edited : NIL

\* Books with ISBN/ISSN numbers with details of publishers:05

\* Citation Index NIL

\* SNIP : NIL

\* SJR: NIL

\* Impact factor NIL

\* h-index NIL

**20. Areas of consultancy and income generated:** NIL

**21. Faculty as members in**

a) National committees

Name	International Committees	Membership No.
Ms. Mandeep Kaur	ISTE Society	105631
Er.Richa Sharma	ISTE Society	105632
Er.Navjot Kaur	ISTE Society	105633
Er.Priya Kapoor	ISTE Society	105634
Er.Jasjit Kaur	ISTE Society	
Er.Prabhjit singh	ISTE Society	

b) International Committees: NIL

c) Editorial Board:

- Ms. Mandeep kaur member in Editorial Board of “International Journal of advances in Engineering Research” *e-ISSN:2231-5152, p-ISSN: 2454-1796*
- Ms. Mandeep kaur member in Editorial Board of “International Journal Of Research in Science & Technology” *e-ISSN:2249-0604, p-ISSN: 2454-180X*

**22. Student projects**

a) Percentage of students who have done in-house projects including inter departmental/programme: 85 %

Each student in Btech IT Completes in-house project in the 8<sup>th</sup> sem. The Department appoints guide for each student.

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: Industrial training provided to the students in 8<sup>th</sup> sem 15%

**23. Awards / Recognitions received by faculty and students :**

Name	Nature	Award
Ms. Mandeep kaur	Faculty	ISTE Best Teacher Award
Jasjit Kaur	Student	Gold Medal from PTU ( 2008 – 12 ) , B.Tech (IT)
Preeti Kumari	Student	Gold Medal from PTU ( 2010 – 14 ) , B.Tech (IT)
Sapinder Kaur	Student	Best Student Award of ISTE at CT Institute, Jalandhar
Rashmeen kaur	Student	Best Student Award of ISTE at Adesh Institute , Faridkot

**24. List of eminent academics and scientists/visitors to the department**

S no.	Resource Person	Year	Topic
1	Mr. L.S.Chabbra	7 <sup>th</sup> January 2015	GENERAL AWARENESS OF CYBER SECURITY
2	Mr. Madumadakar	16 <sup>th</sup> sept,2014	Bluemix
3	Dr. Anil Verma	31 <sup>st</sup> October 2014	Optimal & Effective Use of Social Networking Sites
4	Dr. Hardeep Singh	31 <sup>st</sup> October 2014	SMAC Technologies
5	Dr. S.K. Barai, Professor from IIT Kharagpur	4 <sup>th</sup> June -2013	2013INTRODUCTION TO SOFT COMPUTING

**25. Seminars/ Conferences/Workshops organized & the source of funding**

S. No.	Date	Topic of the Seminar	National/ International	Funded by
1	16 <sup>th</sup> Sept, 2014	Bluemix	National	IBM
2	17 <sup>th</sup> -18 <sup>th</sup> Dec 2014	Inter-Disciplinary Research in Engineering Technology & Management	National	PTU
3	7 June 2014	DIP Using MATLAB	National	PTU
4	25 <sup>th</sup> april,2014	Role of Cryptography in Information Security	National	PTU

b). International : NIL

**26. Student profile programme/course wise:**

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
2014-15	45	15	7	8	33%
2013-14	45	21	12	9	46.6%
2012-13	68	38	14	24	55.8%
2011-12	67	60	34	26	89.5%

\*M = Male \*F = Female

**27. Diversity of Students**

Name of the Course	% of students	% of students from other States	% of students from abroad
B.Tech. 2014-15	90.4	9.5	0
B.Tech. 2013-14	96.8	3.2	0

B.Tech. 2012-13	92	8	0
B.Tech. 2011-12	100	0	0

a) National

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	40%			
PG to M.Phil.	-			
PG to Ph.D.	-			
Ph.D. to Post-Doctoral	-			
<b>Employed</b>	2014	2013	2012	
• Campus selection	8	8	6	
Entrepreneurship/Self-				

30. Details of

Infrastructural facilities a) Library

S.No.	No of books in department library	No of journals of Department library	No of books in main library	No of journals in main library	No of books & journals in research centre
1	68	nil	Vol-1274, Title-285	6 national and international e-journal access by delnet	Nil

b) Internet facilities for Staff & Students : 64 mbps leased line connectivity(24\*7)

c) Class rooms with ICT facility: Smart Classes

d) Laboratories

S.no.	Lab Name	Description	No. of Computers
1.	Fundamental of Computer and Information Technology Lab	Turbo C++	30
2.	Programming Lab	Java 6.0 (JDK 1.6. 0_14) and VB .Net (2008)	30
3.	Network Operating System Lab	Unix , Linux	30
4.	Computer Graphics Lab	Oracle 10g	30

5.	Hardware Lab		
6	Internet Lab.		

**31. Number of students receiving financial assistance from college, university, government or other agencies : 30**

These students of B.tech received scholarship from College  
Batch 2013-2014

Sapinderjit Kaur	B.Tech IT 4th Semester	May- 2013
Sandeep Kaur	B.Tech(IT) 4th Semester	May 2013
Preeti Kumari	B.Tech(IT) 6th Semester	May 2013
Sandeep Kaur	B.Tech (IT) 4th Semester	May-2013
Ambica Sood	B.Tech(IT) 4th Semester	May-2013

Batch 2012-2013

Sapinderjit Kaur	B.tech.(IT) 2nd Semester	April-2012
Sapinderjit Kaur	B.Tech.(IT) 3rd Semester	Dec-2012
Sandeep Kaur	B.Tech.(IT) 3rd Semester	Dec-2012
Preeti Kumari	B.Tech (IT) 5th Semester	Dec-2012

Batch 2011-2012

Shayamal Kathuria	B.Tech.(IT) 3rd Semester	Dec-2011
Amanjot kaur Randhawa	B.Tech.(IT) 7th Semester	Dec-2011
Navneet Kaur	B.Tech.(IT) 5th Semester	Dec-2011
Amanjot kaur Randhawa	B.Tech.(IT) 6th Semester	May-2011
Shayamal Kathuria	B.Tech.(IT) 3rd Semester	Dec-2011
Amanjot kaur Randhawa	B.Tech.(IT) 7th Semester	Dec-2011
Navneet Kaur	B.Tech.(IT) 5th Semester	Dec-2011
Amanjot kaur Randhawa	B.Tech.(IT) 6th Semester	May-2011
Jasjit Kaur	B.Tech.(IT) 7th Semester	Dec-2011
Simranpreet Kaur	B.Tech.(IT) 5th Semester	Dec-2011
Chakshu Malhotra	B.tech.(IT) 5th Semester	Dec-2011
Sandeep Kaur	B.Tech.(IT) 7th Semester	Dec-2011
Jasjit Kaur	B.Tech.(IT) 6th Semester	May-2011
Sheral Kalsi	B.Tech(IT)5th Semester	Dec-2011
Sandeep kaur	B.Tech.(IT) 6th Semester	May-2011
Winnie Khanna	B.Tech.(IT) 5th Semester	Dec-2011
Ravneet Kaur	B.Tech.(IT) 3rd Semester	Dec-2011
Malkiat Singh	B.Tech.(IT) 5th Semester	Dec-2011
Prabhdeep Kaur	B.Tech.(IT) 5th Semester	Dec-2011
Amandeep Kaur	B.Tech.(IT) 5th Semester	Dec-2011

**32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts:**

Sr.	Date	Topic	Resource Person
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No			
1	31 <sup>st</sup> October 2014	Optimal & Effective Use of Social Networking Sites	Dr. Anil Verma
2	31 <sup>st</sup> October 2014	SMAC Technologies	Dr. Hardeep Singh
3	7 <sup>th</sup> June 2014	Digital Image Processing & Research Issues	Dr. Lakhwinder Kaur
4	7 <sup>th</sup> June 2014	Image enhancement in spatial and frequency domain using MATLAB	Dr. Amandeep Kaur
5	7 <sup>th</sup> June 2014	Face Detection and Face Recognition	Dr. Amit Verma
6	28 <sup>th</sup> March 2014	Network Security	Dr. Maninder Singh
7	17 <sup>h</sup> Feb 2014	Placement avenues with respect to intelligent web base e-governance applications	Dr. Kawaljeet Singh
8	17 Oct 2013	Applications of Simulation and Modeling in the fields of Computer Applications and Management	Dr. Kawaljeet Singh
9	13 <sup>th</sup> Sep 2013	Cloud Computing	Dr. Sandeep Sharma
10	4 <sup>th</sup> June 2012	INTRODUCTION TO SOFT COMPUTING	Dr. S.K. Barai, Professor from IIT Kharagpur

### 33. Teaching methods adopted to improve student learning

- Multimedia Projector
- Visual Chart
- Video Lectures
- Simulation
- Group Discussion
- Seminar

### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Active participation in youth festival and other activities organized by

- Blood Donation Camp
- Voter ID Enrolment
- Plantation
- Fund Collection for flag day, floods

### 35. SWOC analysis of the department and Future plans

Strengths

- Well equipped laboratories with latest systems and required software.
- Well Maintain and updated Laboratories even tested and Authorized by TCS to conduct online exam for IBPS, Gate & IIT-JEE.

Weakness

- Communication skill very poor



- Low motivation due to non availability of jobs
- Lack of involvement by parents & teachers

#### Opportunities

- Preparation of learning resources (LRs) in various Topics of Information Technology is yet another unexplored area.
- Scope for providing training to the local youth in the area of \ IT and to make them employable.

#### Challenges'

- Because of more number of Engineering Colleges, quality of intake is poor, especially in rural Engineering Colleges.
- Rapid changes in technology and time bound Learning & Training skills for the faculty.

#### Futures Plans

- To take up R&D projects from funding agencies like DST, UGC and AICTE.
- To strengthen the industry-institute interaction

## Annexure1(Refer Para 19)

Er. Mandeep kaur

1	A Hybrid Pixel based Fusion Approach	International Journal Of Advance Research in Compu Science And Management Studies	Volume 1
2	A detailed comparative study of pixel based image fusion techniques	International Journal of Recent Scientific Research	Volume 4
3	Metamorphism using Warping and Vectorization Method for Image: Review	International Journal of Engineering Research and Applications (IJERA)	Volume 2 / pp. 1322-1328
4	An Approach in the Software Testing Environment using Artificial Bee Colony (ABC) Optimization	International Journal of Computer Applications	Volume 58
5	A DETAILED COMPARATIVE STUDY OF VARIOUS IMAGE FUSION TECHNIQUES USED IN DIGITAL IMAGES	International Journal of Advanced Engineering Technology	Volume 4 / Pp 50-52
6	A Novel Color Image Face Feature Recognition Using Image Morphing	Conference At Global Institute	
7	Techniques used in Image Morphology: A Review	International Journal of Advanced Computing	Volume 35
8	Performance Analysis of scheduling Algorithm	Proceeding of international conference on Recent trends in Computer Science	
9	A Comparative Study of Various Digital Image Fusion Techniques	<i>International Journal of Computer Applications</i>	Volume 114(4):26-31, March 2015
10	A review on Session Initiation Protocol (SIP)	International Journal of Management, IT and Engineering	Volume : 5, <b>295-300</b>

Er. Richa Sharma

Enhancement of firewall filtering Techniques	Volume 2,issue :oct 2013	IJETTCS
Evaluating the performance of wireless network with and without load balancing using OPNET modeler	Volume 3,issue :june 2013	IJARCET
A review on Cloud Computing	Volume 2,issue :August 2013	IJETTCS
Improving the performance of AODV with or without load	Volume 3,issue :june 2013	IJARCET
A survey on performance analysis of AODV and DSR	Volume 3,issue :January 2013	IJESRT

Er. Navjot kaur

A survey on Embedded Extended Visual Cryptography Scheme	Volume 2,issue :oct 2013	IJESRT
An Enhanced Embedded Extended Visual Cryptography Scheme	Volume 2,issue :may 2013	IJSHRE
An Improved Scheme of Embedded Extended Visual Cryptography	Volume 2,issue :march 2014	IJCES

Er. Priya Kapoor:

<b>Name Of Paper</b>	<b>Name Of Journal</b>	<b>Year of publishing</b>
A Review on Different Median based Filtering Techniques	IJESRT	2014
An Improved Median Filter Using Decision Based Switching Filter	IJARCSSE	2014
An Improved Modified Decision Based Filter to Remove High Density Impulse Noise	IJARCSSE	2014
A Review On Image Compression	IJARCSSE	2014

Er. Jasjit Kaur

<b>Name Of Paper</b>	<b>Name Of Journal/ conference</b>	<b>Year of publishing</b>
Review of Cloud computing environment	IJETCS	2014
Evaluating the performance of failover cloud in heterogenous nodes	Advancements in Computer and Business Studies	2014