

## Evaluative Report of the Departments

1. **Name of the department** : Computer Science and Engineering
2. **Year of Establishment** : 2008
3. **Names of Programmes / Courses offered** (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

U.G.	B.Tech
P.G.	M.Tech

4. **Names of Interdisciplinary courses and the departments/units involved**

MP:ECE
DCLD:ECE
HRM: MBA

5. **Annual/ semester/choice based credit system (Programme Wise)**

<b>B.Tech</b>	<b>Semester</b>
<b>M.Tech</b>	<b>Semester</b>

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

Course	Class	Course Offered By
FCPIT	B.Tech	IT,CIVIL,ECE
Basic of Computer	MBA	MBA

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	4	4
Associate Professors	8	8
Asst. Professors	24	24

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 Years of Experience	No. of Ph.D.Students guided for the last 4
1	Dr Sandeep Singh Kang	Ph.D.	Professor	Network Security	12	M. Tech. (28) Ph.D-02
2	Dr.Rajiv Mahajan	Ph.D.	Professor	Network Security	13	M. Tech. (30) Ph.D-05
3	Dr. Maninder Singh	MA, M. Phil,	Professor	ELT, Drama	39	
4	Er Rupinder Singh	M.Tech	Associate Professor	IT	6	10

5	Dr. Pooja Mahajan	M.Sc, Ph.D	Professor	Solid Mechanics	4.5	
6	Er Prabhdeep Singh	M.Tech	Associate Professor	Software Engineering	5	8
7	Mr .Charanjit Singh	M. Sc. (Maths),	Associate Prof.	Applied Mathematics	11	
8	Er Gagandeep Singh	M.Tech	Assistant Prof.	IT	6	
9	Er Kantveer	M.Tech	Assistant Prof.	IT	2	
10	Er Jatinder Pal Sharma	M.Tech	Assistant Prof.	CSE	5.5	01
11	Er Shikha Chawla	M.Tech	Assistant Prof.	CSE	5.5	02
12	Er Gagandeep Singh Saini	M.Tech	Assistant Prof.	CSE	2	
13	Er Gaurav Kumar	M.Tech	Assistant Prof.	CSE	3.5	
14	Er Ruby Singh	M.Tech	Assistant Prof.	CSE	1	
15	Er Tejinderdeep Singh	M.Tech	Assistant Prof.	CSE	6	
16	Er Prabhdeep Singh	M.Tech	Assistant Prof.	CSE	3	1
17	Er Samandeep Singh	M.Tech	Assistant Prof.	CSE	5	2
18	Er Gurpreet Kaur	M.Tech	Assistant Prof.	CSE	1	
19	Er Mehak	M.Tech	Assistant Prof.	CSE	0.5	
20	Er Himani	M.Tech	Assistant Prof.	CSE	0.5	
21	Er.Amanjot Kaur	M.Tech	Assistant Prof.	CSE	0.5	
22	Er Rasleen Kaur Deol	M.Tech	Assistant Prof.	CSE	0.5	
23	Er.Amanpreet Kaur Bhaath	M.Tech	Assistant Prof.	CSE	0.5	
24	Er.Vibha Sharma (On Leave)	M.Tech	Assistant Prof.	CSE	4	
25	Er.Navleen Kaur	M,Tech	Assistant Pr	CSE	4	
26.	Ms. Deepshikha	M. Sc. (Maths)	Assistant Prof.	Differential Equations	3	
27.	Ms.Pallavi Sharma	M.Sc. (Chem)	Assistant Prof.		4	
28	Dr. Ravinder singh	M.Sc, Ph.D	Associate Prof.		9	
29	Ms. Vishavjyoti	M.Sc. (Chem)	Assistant Prof.		6	
30	Ms. Upma Vashisht	M.Sc. (Physics)	Assistant Prof.			

31	Dr. Satinder Pal	MA, Ph.D	Professor	Modern Algebra &	33	
32	Er. Mandeep Kaur	M.Tech.	Associate Prof	Image Processing	7	
33	Dr. Leena Jain	Ph.D, MCA	Associate professor	Optimization Techniques	9	6 Ph. D Scholar registered
34	Mr. Amit Puri	Ph.D(Pursing),	Associate Professor	SE, N/W	6	
35	Er. Kimmi Marchanda	M.Tech	Asstt.Prof.	N/W	2	
36	Ms. Samiska	BBA,MBA	Assistant Professor	HRM	2	

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)

Course	Student-Teacher Ratio
B.Tech	1:15
M.Tech	1:12

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

Sanctioned = 6	Filled = 3
Technical=3 Administrative=3	Technical=2 Administrative=1

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.  
Ph.D - 02  
M.Tech - 20

Same as answer to Q. 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 recognized by the University

Punjab Technical University Kapurthala recognized the department to offer M.Tech (CSE) Part Time Course under the Name of Punjab Technical University Regional Center GIMET Amritsar

Punjab Technical University also Recognized the department to offer Ph.D Course Work as per the guidelines of UGC so department is offering the Course work in the various subject along with the common subject research methodology.

19. Publications:

\* a) Publication per faculty- 06

\* Number of papers published in peer reviewed journals (national / international) by faculty and students-103

## Refer Annexure A

\*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

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

Sl. no.	Author Name	Book Name	Publisher
1.	Dr Sandeep Kang	An Integrated Approach to Network Security	Kalyani Publishers
2.	Er Shikha Chawla	OOPS	ABS publishers
3.	Er Gagandeep Singh	Data Structures	Eagle Parkashan
4.	Er. Gagandeep Singh	Advance Database Management Systems	Eagle Parkashan

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

Faculty as members in

a) National committees b) International Committees c) Editorial Boards....

Name	a) National Committees
Dr. Sandeep Singh Kang	Members Board of Studies PTU Kapurthala
Dr. Sandeep Singh Kang	Expert in RIC PTU Kapurthala
b) International Committees	
Dr. Sandeep Singh Kang	Mentor and Members Associations of International Professor Australia
Dr. Sandeep Singh Kang	Sr. Fellow of Universal Association of Computer and electronics Engineers, Hong Kong
Dr. Sandeep Singh Kang	Sr. Members Universal Researchers in Engineering (URENG) <a href="http://www.ureng.org/">http://www.ureng.org/</a>
c) Editorial Board Members	
Dr. Sandeep Singh Kang	Editor in Chief, International Journal of Information Security and Privacy, USA
Dr. Sandeep Singh Kang	International Journal Of Computer Science And Engineering Technology(IJCSET)
Dr. Sandeep Singh Kang	International Journal of Computer Applications and Information Technology (IJCAIT).

### 22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/programme - 68%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies - 32%

### 23. Awards / Recognitions received by faculty and students

Name of Faculty	Awards
Er.Prabhdeep Singh	Gate Qualified
Er.Mehak	Gate Qualified
Er.Himani	Gate Qualified
Er.Rasleen Kaur Deol	Merit Holder From 10 <sup>th</sup> to Till M.Tech
Er. Gagandeep Singh	Best Paper Presentation awards In international Conference organized by Lovely Professional University Phagwara
Er. Gagandeep Singh	A faculty member of the department got an appreciation letters from the institution for best results for their respective results.

Awards				
1	Ms. Aditi Goel	Gold Medal from PTU ( 2008 – 12), B.Tech (CSE)		
Cultural Events				
Sno.	Name	Event	Place	Position
1.	Raghu Kanojia	Razzmatazz	NIT, Jalandhar	2nd
2.	Bindia Singh	Razzmatazz	NIT, Jalandhar	2nd
3.	Monika	Razzmatazz	NIT, Jalandhar	2nd
4.	Kanishk Handa	Razzmatazz	NIT, Jalandhar	2nd
5.	Rajeev	Razzmatazz	NIT, Jalandhar	2nd
6.	Shakshi	Razzmatazz	NIT, Jalandhar	2nd
7.	Raghu kanojia	Thomso Got talent	IIT Roorkee	2nd
8.	Rajeev mahajan	Thomso Got talent	IIT Roorkee	2nd
9.	Kanishk handa	Thomso Got talent	IIT Roorkee	2 <sup>nd</sup>
10.	Raghu Kanojia	Flower Arrangement	SSGI	1 <sup>st</sup>
11.	Rahul	Mimicry	SSGI	2nd

#### 24. List of eminent academicians and scientists / visitors to the department

Sr. No.	Topic	Resource Person
1	Research Initiatives in Engineering Education	Dr. M.K. Tiwari
2	Cloud Computing: A New Era Infrastructure	Dr. Sandeep Sharma
3	Career Opportunities in Marketing and Finance	Mr. Paramjit Singh Gill
4	Applications of Simulation and Modeling in the fields of Computer Applications and Management	Dr. Kanwaljit Singh
5	Mainframe Computer	Mr. Ankit Gupta,
6	Biomolecular Electronics and Nanotechnology: A path forward	Dr. Inderpreet Kaur

7	Careers Opportunities in IBM	Mr. Amit
8	Difference between Research and Real time research	Dr. Gurwinder Singh
9	Virtualization and Cloud Computing	Mr. Vipin Gupta
10	Innovations in Research & Wireless Sensor Networks	Prof. (Er.) Anand Nayyar

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

- a) National  
b) International

Seminars/Conferences/Workshops organized & the source of funding				
a) National				
Date	Topic of the Seminar	National/International	Funded by	
25 April-14	Role of Cryptography in Information security	National	PTU	
2	IBM ACADEMIC INITIATIVE	National	IBM	
17,18 Dec 2014	Inter- Disciplinary Research in Engineering Technology & Management	National	Institute	
b) International				
S. No.	Date	Topic of the Seminar	National/International	Funded by
1	2 & 3 March 12	International Conference on Emerging trends in IT and its Applications	International	Institute
2	12,13 May 2015	ICCICT-15	International	Institute

## 26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
2011 – 12					
B.Tech (CSE)	152	120	50	70	78.90
M.Tech (CSE)	28	18	4	14	64.28
2012-13					
B.Tech (CSE)	124	94	51	43	75.80
M.Tech (CSE)	34	24	3	21	70.58
2013-14					
B.Tech (CSE)	98	68	34	34	69.38
M.Tech(CSE)	47	24	3	21	51.06
2013-14					
B.Tech (CSE)	92	62	30	32	67.39

M.Tech(CSE)	44	24	4	20	54.54
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\*M = Male \*F = Female

## 27. Diversity of Students

Academic year	Name of the course	% of students from the same state	% of students from other States	% of students from abroad
2013 – 14	Tech CSE	78%	22%	0
2012 – 13	Tech CSE	88%	18%	0
2011 - 12	Tech CSE	92%	8%	0
2010 - 11	Tech CSE	95%	5%	0

## 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Sr. No	Examinations	No of Students
1.	GATE	Nil
2.	IELTS/TOFFEL	5
3.	Admitted in foreign University	Nil
4.	Defense	1

## 29. Student progression

Student progression Against enrollment%	2013 – 14	2012 – 13	2011 - 12	2010 - 11
UG to PG	29	18	17	22
Employed: Campus selection	46	38	40	45
Other than campus recruitment	18	15	22	13
Entrepreneurship/Self – employment	7	22	5	20

- Internet facilities for Staff & Students 64Mbps Leased Line Connectivity (24\*7)
- Class rooms with ICT facility: 2

### Teaching Aids Details

Multimedia Projector  
Visual Chart  
Chalk and Green Board

Laboratories:

S. No.	Lab Name	Description
1.	Oracle Lab	C,C++,VB.Net ,Oracle Client
2	DAA	C,C++,Code Block
3	Internet Lab	C,C++,Coral Draw, IBM Rational
4	Computer Networks	C,C++ Java,Eclipse
5	CISCO	C,C++,Java,VB2010
6	R&D	C,C++,SQL Server,Photoshop

<b>30. Details of Infrastructural facilities</b>					
c) Library					
Sr. No.	No. of Books in Departmental Library	No. of Journals of Departmental Library	No. of Books in Main Library	No. of Journals in Main Library	No. of Books & Journals in Research Centre
11	314	10	3755	12	0

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

	FWS	SC	College
2012-2013	5	00	1
2013-2014	4	2	0
2014-2015	3	13	0

Sno.	Name of Students	Awards			Amount
1	Ravneet Kaur	B.Tech.(CSE) 2nd Semester	Apr-12	1st	50000

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

Sr. No.	Date	Topic	Resource Person
1	4 <sup>th</sup> June	Introduction to Soft Computing	Dr. S.K Barai Professor from IIT Kharagpur



2.	September 2nd, 2015.	Innovations in Research & Wireless Sensor Networks	Prof. (Er.) Anand Nayyar Assistant Professor & Head- Academic Research, KCL Institute of Management & Technology, Jalandhar
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### 33. Teaching methods adopted to improve student learning

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

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

- Blood Donation Camp
- Voter ID Enrolment
- Plantation
- Fund Collection
- Tree Plantation
- Swachh Bharat
- Fund Collection for National Calamity.

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

#### • Strengths

- Availability of qualified and experienced faculty.
- Well equipped laboratories with latest systems and required software.
- Systematic monitoring of teaching-learning process.
- Active participation of alumni for career guidance and improvement.

#### • Weakness

- Being a Self Financing Institute there is no direct fund from the Govt which some time hindered research work and further growth in terms of equipments.
- Student interaction with other institutions and industry is insufficient and has a scope of improvement. Though there is provision of industrial training after third year, more interactions are required for collaborating with industry.
- Alumni of the institute are at senior levels in quite a good number of companies in India and abroad. The full potential of such alumni is not explored to the maximum yet.

#### • Future Plans

- Research Center For PhD Course Work
- Centre Research Lab of Big Data and Android
- NBA Accredited Department

#### • Opportunities

- Financial autonomy
- Internal/External Funding for Projects
- Recognition to invention through patent
- Autonomy in curriculum Development
- Organizing International Conferences
- Challenges
  - Competition from other universities and college are very high;
  - Getting funded projects;
  - Training students beyond academics;
  - Fluctuating demand in Industry;
  - Getting faculty with experience

**Annexure A (Refer Para 19)**

S.NO	Faculty Name	National		International	
		Journal	Conference	Journal	Conference
1	Dr. Sandeep Singh Kang		15	40	6
2.	Dr.Rajiv Mahajan	6	4	3	2
3	Prabhdeep Singh		2		
4	Gagandeep Singh Saini			2	
5	Rupinder Pal Singh		1	2	
6	Shikha Chawla		2	2	
7	Samandeep Singh			7	
8	Jatinder Pal Sharma			1	
9	Gaurav Kumar				
10	Tejinderdeep Singh		2	3	
11	Prabhdeep Singh Arora				
12	Gurpreet Kaur			3	

13	Gagandeep Singh				
14	Ruby Singh			3	
15	Kantveer	1			
16	Amanpreet Kaur		2	2	
17	Mehak		2	1	1
18	Himani		2	4	1
19	Rasleen Kaur		1	1	1
20	Harpreet Singh	1			
21	Vibha Sharma (On Leave)				
22	Navleen Kaur	1	2		2