Internal Quality Assurance Cell (IQAC) SGT University

Annual Report (Aug 2016- July 2017) Department of Computer Science and Engineering

Edited by: Department of Computer Science and Engineering (Brief write-up)

Department at a Glance (2016-17)

Department of Computer Science and Engineering

The Department of Computer Science and Engineering at SGT University is renowned for its excellent academics and placements. The department has highly qualified excellent teaching and non-teaching technical staff. The departmental faculty is involved to impart good technical education to students and involved in research related activities. Our Department has more than 50 research publication in reputed nation and international Conferences/Journals. Besides this the faculty continuously upgrades its technical & professional skills by way of Faculty Development & Training Programmes.

Our experienced faculty exposes the would be computer engineers to a rigorous and exhaustive industry oriented curriculum designed to bring out the best in them and to keep them in touch with the latest state of the art technology. Our curriculum develops students in Soft skills and Technical skills both gradually. Besides imparting theoretical knowledge, a lot of stress is laid on projects, Industrial Training and Certification.

The teaching program has been devised keeping in view close interaction with the industry. The competence of the department is reflected in the growing demand for its fresh graduates.

Our Department focuses on Institute-Industry interface programs that enable the students to interact constantly with the industries. Equal importance is given to the classroom learning which is meant primarily for the theoretical or conceptual inputs of knowledge on a variety of projects.

B.Tech programme in CSE lays emphasis on theoretical and practical aspects of object-oriented programming, software engineering, Computer organization & architecture, database management, operating systems, theory of computation, compiler design, computer graphics, computer networks and Microprocessors and microcontrollers. The programme has many job prospects in the national as well as global market. For imparting the quality education, the department is endowed with latest version of PCs and software and hands-on exprience, have been organized where innovative activities are planned and executed.

Name of the Department Computer Science and Engineering

Year of establishment 2015

1. List of Faculty with designations

S. No.	Name	Designations
1	Dr. Amit Kumar Goel	Professor
2	Mr. Sumit	Asst. Prof.
3	Mr Gaurav	Asst. Prof.
4	Mr. Reenu	Asst. Prof.
5	Mrs Yashika	Asst. Prof.
6	Mrs Surbhi	Asst. Prof.
7	Mrs Kalpana	Asst. Prof.
8	Mr. Yogesh	Asst. Prof.
9	Mr. Rajiv	Asst. Prof.
10	Mrs Vimmi	Asst. Prof.
11	Mrs Neha	Asst. Prof.
12	Mrs Preeti	Asst. Prof.
13	Mrs Shweta	Asst. Prof.
14	Mrs Satnam	Asst. Prof.

2. Names of programmes offered (UG, PG, M.Phil., Ph.D., M.Sc., etc.)

S.No.	Programme offered in	Programme offered in	Programme offered in
	UG	PG	Ph.D
1	Bachelor of Technology (Computer Science & Engineering)	Master of Technology (Computer Science & Engineering)	Doctor of Philosophy (CSE)
2	Bachelor of Computer Applications (BCA)	Master of Computer Applications (MCA)	

3. Education:

a). Hours of teaching in each subject

Under graduation: Total 35 - 40 hour for theory classes are allotted for each subject per semester with 3 credit of theory and 2 credit for practical in B.Tech /BCA/MCA. Post graduation: Total 35-40 hour of theory classes is allotted for each subject in a semester with 3/4 credit of theory and 2 credit of practical in M.Tech 2 year programme of SGTU

Other trainings: Industrial exposure, Industrial training, CCNA (Certified by CISCO), D-Link Wireless, Spoken Tutorial (IIT Bombay), IOT (Intel).

b). Continued Education (workshop, seminar, symposium, conferences)

Event	Attended	Organized	Paper / poster presented	Guest lectures delivered	Keynotes delivered
Conference national	6	Nil	Nil	Nil	Nil
Conference international	Nil	Nil	Nil	Nil	Nil
Conventions	NIL	NIL	NIL	Nil	Nil
Symposium	NIL	NIL	NIL	NIL	NIL
Workshops	25	10	Nil	Nil	Nil
Others	1				
Total	32	10	Nil	Nil	Nil

i) Summary of the above, department wise (Total No.)

ii). Details of above, Faculty member wise...

Name : Dr. Amit Kumar Goel

Conference National:

• Dr. Amit Kumar Goel, Sumit Kumar Mudgil." Optimization of steganography on Audio wave by embedding the min and max message in various layers and spy analysis", National conference on Emerging Trends in Electronics and Communication, (ETEC-2017) held on 27-28 January 2017 at Ajay Kumar Garg Engineering College, Ghaziabad(U.P.).

Work Shop (Attended and Organised):

- Two days workshop on "Gesture base Robotic Workshop" on 10-11 March, 2016 was organized by Department of Computer Science & Engineering .The workshop was centered around classification of robotics in use, verticals of robotics applications and types of automaton or robots.
- One Day Workshop on "Innovation & New Product Development" was organized on 16th Jan, 2017 by Department of Computer Science & Engineering, FET, SGT University, Gurgaon in association with iMAGINxP. The Co- founder (iMAGINxP) Mr. Shashank Shwet delivered the lecture by using various practical methods and focused on UX Programme.
- The whole workshop was divided into two sessions. In first session he described about the new innovation and ideas which can lead the market in coming decade. In second session

some activities related to designing and innovation of new product was given to students. Students came up with their ideas and new thoughts. The students highly appreciated this event.

• Department of CSE, Faculty of Engineering & Technology, SGT University organized a one day Workshop "Microsoft Imagine Camp" on 16th March, 2017.

Name : Mr. Gaurav

Workshops (Attended and Organized)

- Attended 5 days workshop on Internet of Things (IoT) in association with Intel Banglore, at SGT University from 08-08-2017 to 12-08-2017.
- Attended ICT based 5 days workshop on "Skill Development and Innovative approach towards Employment Generation in India" in association with NITTTR Chandigarh at SGT University, Gurgaon from 24-07-2017 to 28-07-2017.
- Attended 2 days workshop on Internet of Things (IoT) in association with Innovians Technologies, Noida at GD Goenka University from 07-06-2017 to 08-06-2017.
- Attended ICT based 5 days workshop on Wireless Networking in association with NITTTR Chandigarh at SGT University, Gurgaon from 22-05-2017 to 26-05-2017.
- Participated in FDP- Faculty Capacity at SGT University from 13-02-2017 to 15-02-2017.
- Attended ICT based 5 days workshop on PHP & MySQL in association with NITTTR Chandigarh at SGT University, Gurgaon from 23-01-2017 to 27-01-2017 (excluding 26-01-2017).
- Participated in FDP- Pedagogic and Personal Effectiveness at SGT University from 10-01-2017 to 12-01-2017.
- Attended ICT based 5 days workshop on Cloud Computing in association with NITTTR Chandigarh at SGT University, Gurgaon from 05-12-2016 to 09-12-2016.
- Attended TEQIP Sponsored one week FDP on Recent innovation in cloud computing and networking technologies(RICCNT-16) at DCRUST-Murthal, Sonepat from 30-05-2016 to 03-06-2016.

Name : Mr. Rajiv

Work Shop (Attended/Organised):

- Two days workshop on "Gesture base Robotic Workshop" on 10-11 March, 2016 was organized by Department of Computer Science & Engineering.
- One Day Workshop on "Microsoft Imagine Camp" on 16th March, 2017 was organized by Department of Computer Science & Engineering, FET, SGT University, Gurgaon.
- One Day Workshop on "Innovation & New Product Development" was organized on 16th Jan, 2017 by Department of Computer Science & Engineering, FET, SGT University, Gurgaon in association with iMAGINxP.
- Attended ICT based 5 days workshop on Cloud Computing in association with NITTTR Chandigarh at SGT University, Gurgaon from 05-12-2016 to 09-12-2016.
- Attended ICT based 5 days workshop on "Skill Development and Innovative approach towards Employment Generation in India" in association with NITTTR Chandigarh at SGT University, Gurgaon from 24-07-2017 to 28-07-2017.

- Attended ICT based 5 days workshop on Wireless Networking in association with NITTTR Chandigarh at SGT University, Gurgaon from 22-05-2017 to 26-05-2017.
- Participated in FDP- Faculty Capacity at SGT University from 13-02-2017 to 15-02-2017.
- Attended ICT based 5 days workshop on PHP & MySQL in association with NITTTR Chandigarh at SGT University, Gurgaon from 23-01-2017 to 27-01-2017 (excluding 26-01-2017).
- Participated in FDP- Pedagogic and Personal Effectiveness at SGT University from 10-01-2017 to 12-01-2017.
- Organised IOT based 5 days workshop in association with INTEL at SGT University, Gurgaon from 08-08-2017 to 12-08-2017.

Name : Preeti garg

Work Shop (Attended and Organised):

- One Day Workshop on "Innovation & New Product Development" was organized on 16th Jan, 2017 by Department of Computer Science & Engineering, FET, SGT University, Gurgaon in association with iMAGINxP.
- Department of CSE, Faculty of Engineering & Technology, SGT University organized a one day Workshop "Microsoft Imagine Camp" on 16th March, 2017.

Name : Mr. Sumit

- "Postulation of new force carrier and photon by solar energy". This research work was presented in International Conference on Informatics, Management and Technology of solar energy Issues and Opportunities, March 2, 2016.
- "Steganography on audio wav and spy analyses to see breaks in encryption security introduced with technology of solar energy". This research work was presented in International Conference on Informatics, Management and Technology of solar energy Issues and Opportunities, March 1, 2016.
- "Optimization of Steganography on Audio wave by embedding the minimum and maximum message in various layers and spy analysis" This research Paper was Presented in the National Conference on Emerging Trends in Electronics & Communication, (ETEC-2017) held on 27-28 January 2017 at Ajay Kumar Garg Engineering College, Ghaziabad (U.P)

Name : Mrs. Vimmi Malhotra

Conference National:

- Vimmi Malhotra, Jyoti Yadav, "An Anatomy of the Grid: A study of Grid Computing", International Conference on Management and Information Technology 7th Commit, 15th December 2016.
- Vimmi Malhotra, Siddharth SuNIL, "Cryptography-A Secret Writing", International Conference on Management and Information Technology 7th Commit, 15th December 2016.

Work Shop (Attended and Organised):

- Attended five days Short term program on "In-country Program on Instructional Design & Delivery Systems", organized by Colombo Plan Staff College, Philippines at NITTTR, Chandigarh.
- Attended five days Online Workshop on "Artificial and Neural Network", sponsored by NITTTR in collaboration with MHRD and ICT at Dronacharya College of Engineering, Gurugram.
- Attended and organised two days workshops on "Game Jam" by Microsoft, at Dronacharya College of Engineering, Gurugram.

Seminar (Attended and Organised):

• Attended one day National Seminar on "Recent Trends in Data Analytics" by Gitarattan International Business School, Rohini, New Delhi on 8th October 2016.

Name: Neha Garg

Work Shop (Attended and Organised):

- Attented the short term course on PHP &MySQL (ICT BASED) by NITTR ,Chandigarh on 23-27 January 2017.
- One Day Workshop on "Innovation & New Product Development" was organized on 16th Jan, 2017 by Department of Computer Science & Engineering, FET, SGT University, Gurgaon in association with iMAGINxP. The Co- founder (iMAGINxP) Mr. Shashank Shwet delivered the lecture by using various practical methods and focused on UX Programme.
- Attended and organized a one day Workshop "Microsoft Imagine Camp" on 16th March, 2017. By Microsoft Team - Mr. Venkatesh Sarvasiddhi, Head- Academic Initiative, Ms. Vinnie Jauhari, Director Education Microsoft, Ms Simran Dawar, Manager – Microsoft Surface Team, Mr. Ashish Gupta, Senior Product Marketing Manager for Education, Mr. Nitin Pandit, Microsoft MVP, Ms Tara McCartney
- Participated in a D-link workshop organised by D-LINK Academy by Mr. Sudhanshu ojha in from 1st 3rd Feb 2017 from 9:00am-4:00pm
- Organized and participated in One day advance workshop on "Mobile Application Development" by Raja Venkatesh, Head of Windows Market place on 12 Nov 2016.
- Attented the short term course on "Mobile Computing" (ICT BASED) by NITTR , Chandigarh on 15-19 Feb 2016.
- Organized and Attented a one day workshop on "FOSS Technology" by Mr.G.T Rao, Cofounder FOSS Yatra on 6th Feb 2016.
- .Attented the short term course on "Open Source Technology" (ICT BASED) by NITTR ,Chandigarh on 04-08 Jan 2016.
- Organised and atentada one day workshop on "APPLICATION DEVELOPMENT" by Mr. Venkatesh Sarvasiddhi ,Head- Microsoft innovation center on 12 Nov 2016
- Organized and Attended an expert talk on "DIGITAL INDIA FUTURE" by Ms.Shefali Dash, Former director journal, national infomatics center ,govt of india on 1 September 2016.

4. Publications: 10

i) Journal articles

		Work	National	International		
S. No.	Name	Experience	Publication	Publications	Designations	
	Dr. Amit					
1	Kumar Goel	21	2	1	Professor	
	Mr. Sumit				Assistant	
2	Kumar Moudgil	7.5	0	5	Professor	
3	Mr Gaurav	6	Nil	Nil	Asst. Prof.	
4	Mr. Reenu	6.5	Nil	Nil	Asst. Prof.	
5	Mrs Yashika	1.5	Nil	Nil	Asst. Prof.	
6	Mrs Surbhi	3.7	Nil	Nil	Asst. Prof.	
7	Mrs Kalpana	8	Nil	Nil	Asst. Prof.	
8	Mr. Yogesh	4.5	Nil	Nil	Asst. Prof.	
9	Mr. Rajiv	7	Nil	Nil	Asst. Prof.	
					Assistant	
10	Mrs Vimmi	4	0	1	Professor	
11	Mrs Neha	4	2	1	Asst. Prof.	
					Assistant	
12	Preeti Garg	4	0	3	Professor	
10					Assistant	
13	Mrs Shweta	8	0	2	Professor	
14	Mrs Satnam	4	Nil	Nil	Asst. Prof.	

S. no.	Туре		Total no. Of Articles	Nationa I	Internat ional	others
1	Indexed	6			8	
2	Non indexed	10				
3	Peer reviewed					
4	Non					

pe			
rev	viewed		

b) Details of the above (to be furnished faculty member wise).

 (papers published in peer reviewed journals (national / international, listed in National/International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database, International Social Sciences Directory, EBSCO or any other indexing agency, Citation Index (source)google scholar, Research Gate, Scopus, SNIP, SJR Impact Factor ... range / average, h-index)

S. no.	Article in Vancouver style	National/ international	Database	Citation index Range/ average	SJR / SNIP	h- index	Impact factor
1	Satinder Singh, Dr. Amit Kumar Goel." A Significant Analysis of Multi-regional and Multi- Lingual site on Multiple servers", International journal of Enhanced Research in Science, Technology & Engineering Vol 5 issue-5, May 2016.	National	-	Google Scholar	-	-	-
2.	Dr. Amit Kumar Goel, Satinder Singh " A Comprehensive Study on Echo Content Management System", International journal of Enhanced Research in Science, Technology & Engineering Vol 5 issue-4, April 2016.	National		Google Scholar			
3	Preeti Garg, "Offloading Approach in mobile cloud computing", in IJESMR, ISSN 2349-6193, in march 2017, Vol 4 issue 3.		-	Thomson Reuters, Google Scholar, Citeseer	-	-	2.805
4	Preeti Garg, "Image Enhancement Techniques Based On Histogram Equalization", in IJESMR, ISSN 2349-6193, in march 2017, Vol 4 issue 3.			Thomson Reuters ,Google Scholar, Citeseer	-	-	2.805

5	Preeti Garg "A green step	Inter national	Online ISSN: 2243-	CrossRef	-	-	-
	towards computing: Green		7797	Google			
	Cloud Computing"			Scholar			
	published in "International			Index			
	Journal of Research Studies			Copernicus			
	in Computing 2016 October,			copenneus			
	Volume 5 Number 2, 3-9,						
	ISSN 2243-7797						
6	Mr. Sumit Kumar Moudgil	National		InfoBase			
0	"Effective use of	1 vational		Index IBI			
				Factor for the			
	Steganography on Audio						
	Wave and Spy Analysis". International Journal of			year 2015-16			
				is 3; Thomson			
	Electronics and			Reuters			
	Communication Engineering			Researcher			
	& Technology (IJECET),			ID: H-9822-			
1	Volume 7, Issue 4, July-			2016.			
	August 2016, pp. 32-39;						
	ISSN Print: 0976-6464 and						
	ISSN Online: 0976-6472;						
	Journal Impact Factor						
_	(2016): 8.2691;						
7	Mr. Sumit Kumar Moudgil			InfoBase			
	"Optimization of			Index IBI			
	Steganography by			Factor for the			
	Embedding Minimum and			year 2015-16			
	Maximum Message in to			is 3; Thomson			
	Various Layers of Audio			Reuters			
	Wave and Analysing Signal			Researcher			
	to Noise Ratio".			ID: H-9822-			
	International Journal of			2016.			
	Electronics and						
	Communication Engineering						
	& Technology (IJECET),						
	Volume 8, Issue 5, August-						
	September 2016, pp. 20-28;						
	ISSN Print: 0976-6464 and						
	ISSN Online: 0976-6472;						
1	Journal Impact Factor						
	(2016): 8.2691;						
8	Mr. Sumit Kumar Moudgil	Inter national		Google			
	"Steganography on audio			Scholar			
	wav and spy analyses to see						
	breaks in encryption security						
	introduced with technology						
1	of solar energy".						
1	International Conference on						

		Γ		1	1	1	1
	Informatics, Management and Technology of solar						
	energy – Issues and						
	Opportunities, March 1,						
	2016.						
9	Mr. Sumit Kumar Moudgil	Inter national		Google			
	"Postulation of new force			Scholar			
	carrier and photon by solar						
	energy". International						
	Conference on Informatics,						
	Management and						
	Technology of solar energy						
	– Issues and Opportunities,						
	March 2, 2016.						
10	Mr. Sumit Kumar Moudgil	Inter national		Google			
	"Optimization of			Scholar			
	Steganography on Audio						
	wave by embedding the						
	minimum and maximum						
	message in various layers						
	and spy analysis" Ajay						
	Kumar Garg Engineering						
	College International Journal						
	of Technology						
	(AKGECIJT), Volume 8,						
	No. 1, January-June 2017,						
	pp. 28-31; ISSN Print: 0975-						
	9514 and ISSN Online:						
	0975-9514.						
11	Ravneet Kaur, Vimmi	International	-	Google			3.97
	Malhotra, "Intelligent Load			Scholar,			
	Balancing Approach for			Copernicus,			
	Cognitive Radio Networks", International Journal of			Thomas			
	Engineering Development			returs, etc			
	and Research, ISSN: 2321-						
	9939, Volume 4 Issue 3,						
	January 2016, pp. 404-408,						
	Impact factor: 3.97						
12	Neha Gehlot "A Class	Inter national	ISSN-	Thomson	-	_	2.805
	Cohesion Measure For		2079-2204.PP.104-	Reuters			
	Evaluation For Resuablity "		108(IF:2.21)	,Google			
	World Engineering and			Scholar,			
13	Applied Science Journal A review on quality	Internetional	ISSN:0976-5697	Citeseer			
13	A review on quality Attributes based software	Inter national	/ 40C-0/40 . NIGGI	CrossRef	-	-	-
	Metrics" in International			Google			
	in international			Scholar			

	Journal of Advance Research in computer science		Index Copernicus			
14	Neha Gehlot "Dynamic Inheritance Coupling Metric-Design and Analysis for Assessing Reusability" with INDERSCIENCE PUBLISHERS	Application.Vol:1,No:1 2015.	Thomson Reuters.			
15	Shweta Sharma, "Offloading Approach in mobile cloud computing", in IJESMR, ISSN 2349-6193, in march 2017, Vol 4 issue 3.	-	Thomson Reuters, Google Scholar, Citeseer	-	-	2.805
16	Shweta Sharma, "Image Enhancement Techniques Based On Histogram Equalization", in IJESMR, ISSN 2349-6193, in march 2017, Vol 4 issue 3.		Thomson Reuters ,Google Scholar, Citeseer	-	-	2.805

- Non -indexed publications
- Popular press writings / others
- ii) Abstracts published in conference proceedings. (faculty member wise)

iii) Books with ISBN with details (faculty member wise): NIL

- a) Chapters in Books (Nil)
- b) Edited Books (Nil)
- c) Books publishers :1

Neha Sehrawat nee (Gehlot)	, A Design& Analysis of Inheritance	Inter national	ISBN-
and Dynamic Coupling Met	ric in OOP's , published by Lambert		978-3-33007489-7
Academic Publishing	-		

d) Monographs (Nil)

5. Details of patents and income generated: (Nil)

6. Awards and Honours:Nil

Awards / recognitions received at the national and international level by (in Table. format...)

- Faculty
- Others
- Doctoral / post doctoral fellows
- Students

7. Consultancy and Participation as expert, income generated, (brief note on each): NIL

8. Research

i). Details of the Funded projects department wise: NIL

Sno.	Name of the	Name of	Funding	Indian agency	Project	Grants	Completed/
	faculty/	PI	agency	/ WHO /	title	received	ongoing/new
	department			International /			project
				SGT			submitted
				University			

ii) Details of other non funded / self funded projects: department wise (list only)

S.No.	Name of the students	Name of Faculty	Course	Funded/Self Funded	Funded By	Project Title	Grants Received	Completed/Ongoing
1	Akshit Saxena, Praveen Kumar, Yogesh Sharma, Kaushal Kishore	Ms. Preeti	B.Tech , CSE 3rd sem	Funded	sgt university	Intelligent Burglar Alarm System	10560/-	Ongoing
2	Amit (B.Tech 7th Sem)	Ms. Satnam	Btech	funded	sgt university	wirless carger cum power bank	to be recived (6700)	Ongoing
3	Akash, Akshay, Vikas, Tarun(B.Tech 5th sem)	M s. Surabhi	Btech,CSE	Self Funded	N.A.	A Short Animation Film	0	Ongoing
4	Prabind(CSE 5th SGTU), Dharmendra, Satendra(MCA 3rd)	Ms. Shweta	B.Tech, MCA	Self Funded	N.A.	Grivenances Redressal System	0	Ongoing
5	Sumit,Shikhar,komal	Ms. Yashika	Btech,CSE	self Funded	N.A.	E-Darji	0	Ongoing
6	Nisha (M.Tech), Garima , Preeti, Ashwini (5sgtu)	Ms. Kalpana	B.tech, M.tech	Self Funded	N.A.	Online Assessment System	0	Ongoing
7	Anmol, Gaurav, Neeraj, Mohit Thakran(cse 7th Sem)	Mr. Rajiv	B.Tech	Self Funded	N.A.	Security System Using RFID	0	Ongoing
8	Prabhat, Pahur(CSE 5th MDU), Srishti, Disha (CSE 7th MDU)	Mr. Gaurav	B.Tech	Self Funded	N.A.	Performance Evaluation System	0	Ongoing
9	Sheetal, Sakshi, Anju (CSE 7th Sem MDU)	Mr. Sumit	B.Tech	Self Funded	N.A.	Steganography on Audio Wave	0	Ongoing
11	Ashwini, Prshant, Garima(SGTU 4th	Ms. Reenu	B.Tech	Self Funded	N.A.	Secure Mailing System	0	Ongoing

	sem)							
12	Kumar gaurav (SGTU 3RD SEM)Bharti ,Anjali,Vinita,swati, Ankita (cse 7th sem mdu)	Ms. Neha	B.Tech	Self Funded	N.A.	IOT Based safe Railway Track model	0	Ongoing

iii) Student projects:

Sno.	Name of	Name of	Course	Funded/	Indian agency /	Project title	Grants	Completed/
	the	Guide	PhD, MD,	self	WHO /		received	ongoing
	student		MDS,	funded	International /			
			MSc,		SGT University			
			JRF,					
			SRF					

- percentage of students who have done in-house projects including inter-departmental projects
- percentage of students doing projects in collaboration with other universities /industry / institute

9. Patient Care, please provide detail in enumerative figures during the year of consideration. (write NA if not applicable) NA

Facilities available	
Operations / procedures	
ICU details	
Emergency Duties	
OPD clinics	

10. Other Significant Events

11. Courses in collaboration with other universities, industries, foreign institutions, etc.

S. No.	Courses	Afflictions
1.	Spoken Tutorial	IIT Bombay
2.	CCNA-R&S	CISCO
3.	D-Link (Wireless)	D-Link
4.	IOT	Intel
2.	MOOC	MHRD (Govt. Of India

- 12. Details of programmes discontinued, if any, with reasons Nil
- 13. Examination System: Annual/Semester/Trimester/weekly : Semester
- 14. Choice Based Credit System Give brief note

- a) The CBCS provides choice for students to select from the prescribed courses (core, elective or minor or soft skill courses).
- b) The course structure of each programme consists of 10 Professional Electives and 4 open electives.
- c) Each professional elective gives a choice of three to four courses out of which the student has to select one course.
- d) Each open elective also is given a choice of three to four courses, which does not necessarily have any perquisites and offered to a student of any programme.
- e) A student is introduced to "Choice Based Credit System (CBCS)" for which he/she has to register for the courses as per the following rules:
 - i. Choices are from 1st semester onwards
 - ii. Courses once registered are final and CANNOT be changed / interchanged or alternate choices will not be considered. However, if the subject/course that has already been listed for registration (by the HOD) in a semester could not be offered due to any unforeseen or unexpected reasons, then the student shall be allowed to have an alternate choice either for a new subject (subject to offering of such a subject), or for another existing subject (subject to availability of seats), which may be considered. Such alternate arrangements will be made by the Head of Department, with due notification and time-framed schedule, within the FIRST WEEK from the commencement of class work for that semester.
 - iii. A student has a choice of dropping a course or registering an additional course (from the list of open electives) with a minimum of 21 and a maximum of 29 credits in each semester, but the credits allotted for each semester is considered for promotion. However, dropping a course may be permitted only after prior approval from the faculty advisor and HOD and also within 15 days from the beginning of the current semester
- 15. Participation of the department in the courses offered by other departments, courses in collaboration with other universities, industries, foreign institutions, etc.
- 16. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad (eg. Commonwealth fellowships, WHO fellowships, UNESCO fellowships etc)

S. No.	Name of Faculty	Visit	Date/Month
1	Yashika	Enterprenure India 2017, New Delhi	18 July 2017
2	Yashika, Gaurav	Centre for e- Governence, MEIT	30.1.2017
3	Reenu, Yogesh	Doordarshan Bhavan	24 March 2017
4	Satnam, Shweta, Preeti	Pragati Maidan	2017
5	Neha, Kalpana	HCL Technologies Ltd-Manesar, Gurgaon	03/03/2016.

- 17. Faculty serving in
 - a) National committees b) International committees c) Editorial Boards d) any other (please specify)

Editorial Board Member: Dr. Amit Kumar Goel is an editorial member of IJC (IFRSA International journal of omputing).

18. Faculty recharging strategies (Capacity Building programmes) (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs). (give details).

Workshop conducted in Association of NITTR:

- One week National Level Short term course (ICT Based) on "OPEN SOURCE TECHNOLOGY" was organised Department of CSE in association with NITTTR, Chandigarh from 04.1.2016 to 08.1.2016.
- Department of Computer science and Engineering in association with NITTTR, Chandigarh was organized a National Level Short term course (ICT Based) on "Mobile computing" from 15.2.2016 to 19.2.2016. The Programme is sponsored by AICTE and will be sourced by Department of Computer Science, NITTTR, Chandigarh.
- Department of Computer science and Engineering in association with NITTTR, Chandigarh was organized a National Level Short term course (ICT Based) on "Web Based Content Generation" from 28.3.2016 to 01.04.2016. The Programme is sponsored by AICTE and will be sourced by Department of Computer Science, NITTTR, Chandigarh.
- Department of Computer science and Engineering in association with NITTTR, Chandigarh was organized a National Level Short term course (ICT Based) on "Strategic Planning and Management of Technical Institutions" from 01.08.2016 to 05.08.2016. The Programme is sponsored by AICTE and will be sourced by Department of Computer Science, NITTTR, Chandigarh.
- Department of Computer science and Engineering in association with NITTTR, Chandigarh was organized a National Level Short term course (ICT Based) on "PhP and MySql" from 23.01.2017 to 27.01.2017 . The Programme is sponsored by AICTE and will be sourced by Department of Computer Science, NITTTR, Chandigarh.
- The Department of Computer Science & Engineering organized 3 Days (01 Feb. 2017 03Feb. 2017) Faculty Development Programme on "D-Link Wireless" for the Faculties of CSE & ECE. Total Nine Faculties benefited from this event. In this event, Mr. Nilesh, Sr. Trainer from D-Link Company delivered valuable knowledge on various new Wireless Technologies like Wireless Access Points, Switches and Wireless Controller.
- 19. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance (updated till date)

h.	Qualificatio n			No. of Years	No. Of thesis/ dissertations guided till now (Ph.D. / M.Phil./ PG/ UG/Students)
Dr. Amit			AI, Agent		PhD: 01, M.Tech:03,
Kumar Goel	Ph.D		Technology	20	B.Tech:12
Mr Gaurav	B.Tech,		Machine		
	M.Tech	Asstt. Professor	Learning, Data	06	B.Tech : 04

			Analytics		
Mr. Reenu	B.Tech,		Image		
	M.Tech	Asstt. Professor	segmentation	6.5	B.Tech: 04
Mrs Yashika	B.Tech,				
	M.Tech	Asstt. Professor	AI	1.5	Nil
			Web Mining,		
Mrs Surbhi	B.Tech,		Information		
	M.Tech	Asstt. Professor	Retrieval	3.7	M.Tech :01, B.Tech: 04
Mrs Kalpana	B.Tech,		Cloud		
_	M.Tech	Asstt. Professor	Computing	8	B.Tech : 4
Mr. Yogesh	B.Tech,				
-	M.Tech	Asstt. Professor	Networking	2	
Mr. Rajiv	B.Tech,		OS, Compiler		
-	M.Tech	Asstt. Professor	design	7+	
	B.Tech,		Networking and Information		M.Tech: 02, B.Tech: 06
Mrs Vimmi	M.Tech	Asstt. Professor		4	(Projects)
	B.Tech,	1100001101000001	Software		(1.1.6)00100
Mrs Neha	M.Tech	Asstt. Professor	engineering	3+	M.tech-1 /B.Tech -2
	B.Tech,		Mobile cloud	-	
Mrs Preeti	M.Tech	Asstt. Professor		4	B.Tech:2
			Software		
Mrs Shweta		Asstt. Professor	Engineering	8	B.Tech: 10, MTech:3
	B.Tech,		<u> </u>		
Mrs Satnam	M.Tech	Asstt. Professor	DBMS	4	
	B.Tech,		Steganography		
Mr. Sumit	M.Tech		on Audio Wave	7.5	M.Tech:01, B.Tech:9

20. List of senior Visiting Fellows, adjunct faculty, emeritus professors - Nil

- 21. Programme-wise Student Teacher Ratio : **B.Tech :** Students (124+32+45+47) = 248 Teacher :12 Ratio - 248/13*100 = 21:1 **BCA : (31+25)= 65** Teacher : 02 Ratio: 32.5:1
- 22. Number of academic support staff (technical) and administrative staff: (in Table form)
- 23. Establishment of Research facility / centre (during the year of consideration)
- 24. Student profile programme-wise (No. only):

	Applications	Selected		Pass percentage	
Name of the	Received				
Programme	wherever known	Male	Female	Male	Female
B.Tech (3rd					
Semester)	116	84	32	28.57	34.37
BCA (2016-17)	41	22	6	64.71	85.71
MCA(2016-17)	05	3	2	100	100

25. Diversity of Students (No. only):

			% of Students	
			from other	% of
		% of Students from	Universities	Students
Name of the	% of Students from	other Universities within	outside the	from other
Programme	the Same University	the state	state	countries
MCA	Nil	100%	Nil	Nil
M.Tech	Nil	100%	Nil	Nil

26. Student progression (No. Only)

Student progression	Percentage against enrolled		
UG to PG	Nil		
PG to M.Phil.	NA		
PG to Ph.D.	NA		
Ph.D. to Post-Doctoral	NA		
Employed	06		
Campus selection	04		
Other than campus recruitment	02		
Entrepreneurs	Nil		

27. Diversity of staff (No. Only):

Percentage of faculty who are graduates				
of the same university	0%			
From other universities within the State	10/14 *100 = 71.42%			
from universities from other States	4/14*100= 28.57%			
From universities outside the country	0%			

28. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. In 2016-17 (Nil)

29. Present details of departmental infrastructural facilities regarding

- a) Library (no. of Books and Journals): No. of books- CSE-3631
 - No. of journals-17
- b) Internet facilities for staff and students : Wi-Fi and Cabled both
- c) Total number of class rooms-08
- d) Class rooms with ICT facility-08 (Class room) +01 (Lab)
- e) Students' laboratories 07
- f) Research laboratories -01

S.No.	Name of the Journal
1	Advances inComputational Science & Technology
2	Advances inComputational Science & Technology

3	Global Journal of Engg Research and Technology				
4	Indian Jnl of Computer Science: Theory & Practical				
5	Indian Jnl of Networking & Computer Engineering				
6	Intl Jnl of Mathematics Computer Science &				
	Information Tech				
7	Intl Jnl of Electronics and Computers				
8	Intl Jnl of Embedded Systems and Computer				
	Engineering				
9	Jnl of Engineering Research & Technology				
10	Intl Jnl of Information of Analysis & Processing				
11	Intl Jnl of Information Technology & Engineering				
12	Intl Jnl of Intelligent Information Processing				
13	Indian Jnl of Advances VLSI Design				
14	Jnl of Hybridge Computing Research				
15	Jnl of Cybernetics and Systems				
16	Jnl of Software Engineering & Technology				
17	Indian Jnl of Digital Manufacturing				

30. List of doctoral, post-doctoral students and Research Associates

- a) from the host institution/university Doctoral Mr. Sumit Ms. Reenu
- b) from other institutions/universities Doctoral
 - Mr. Gaurav
 - Ms. Shweta
 - Ms. Surabhi

31. Number of post graduate students getting financial assistance from the university. 02 (Two)

32. FEEDBACK System

Feedback system in University is categorized as follows

1. Centralized Feedback system (5 Point Analysis)

Centralized Feedback System is evaluated on 5 point analysis

Scale	Excellent	Very Good	Good	Satisfactory	Unsatisfactory
Grade	А	В	С	D	E
Score	5.0	4.0	3.0	2.0	1.0

Different parameters are taken into consideration while calculating feedback which includes

1. Quality of course content

2. Practical or applied content of teaching

3. Course coverage and delivery

4. Knowledge base of the teachers

- 5. Teacher's ability to co-relate the subject with other disciplines
- 6. Communication skills of the teacher
- 7. Sincerity and commitment level of teachers .
- 8. Teacher's accessibility outside the class
- 9. Teacher's testing methods to evaluate students
- 10. Learning outcomes
- 11. Encouragement by teachers for class participation
- 12. Fairness of internal assessment
- 13. Student's knowledge about course details, scheme of examinations and ordinances
- 14. Adequacy and quality of relevant labs
- 15. Library support
- 16. Support from administrative staff
- 17. Co-curricular and extra-curricular activities
- 18. Student-teacher relationship
- 19. Handling of student's grievances and
- 20. Career counseling and placement facilities

2. Mentor-Mentee System

Mentor-Mentee system is maintained right from 1st Semester – 8th Semester. Under the interaction section of Mentor's Diary, students provide feedback which is recorded for every 15 days.

3. Suggestion Box

There is provision of suggestion box on Ground Floor where students are welcomed to provide suggestions/feedback

33. Student enrichment programmes [give details of (special lectures / workshops / seminar) involving external experts.]

Workshops

- A workshop on "FOSS Technologies Skill Development" was organised by Deptt. of Computer Science and Engineering, on 6th Feb 2016. The speaker was Mr. G.T. Rao Co-Founder, Foss Yatra
- Two days workshop on "Gesture base Robotic Workshop" on 10-11 March, 2016 was organized by Department of Computer Science & Engineering .The workshop was centered around classification of robotics in use, verticals of robotics applications and types of automaton or robots.
- One Day Workshop on "Innovation & New Product Development" was organized on 16th Jan, 2017 by Department of Computer Science & Engineering, FET, SGT University, Gurgaon in association with iMAGINxP.

MOOC Courses

• Department of computer Science and Engineering, FET was organized basic 3D Animation through Blender. The duration of course is 8 week and it was started on dated 18th Feb 2016. This course will end in 15th April 2016.

Guest Lecture

- Department of Computer Science and Engineering, FET will organize an Expert talk on "Open Source & Virtualization Technology" by Mr. Amit Doegar (Corporate Trainer- NITTTR) on dated 21/3/2016.
- On the occasion of Engineer's day, Dr Shefali Sushil Dash (Former Director General, National Informatics Centre) delivered an expert talk on "Digital India Future" . on dated Sep 15, 2016. In

this talk she focused on Cyber Security and Future Scope in the field of $% \mathcal{L}_{\mathrm{C}}$ cyber security , E-Governance , Cloud Computing etc.

• Department of Computer Science and Engineering, FET SGT University has organised a demonstration on Internet of Things using Intel Galileo Board by Intel College Excellence Programme – Banglore on 17th Jan 2017.

Mr. Surender Kumar Sr. Trainer (ICEP) started with brief introduction on IOT and demonstrated some practical examples by using Intel Galileo Board.

<u>Industrial Visit</u>

- Department of computer Science and Engineering, FET was organized an Industrial Visit at HCL Technologies Ltd-Manesar, Gurgaon on 03/03/2016.
- B. Tech (CSE) students from FET visited CeG and attended the workshop on "Digital India Programme" at Centre for e-Governance (CeG), Ministry of Electronics and Information Technology (MeitY), New Delhi on 30/01/2017.
- Students of CSE visited "Convergence India 2017" at Pragati Maidan, New Delhi on 9/2/2017.
- In Convergence India 2017 more than 50 Multinational companies were participated. The Programme was scheduled in two parts, Conference and Exhibition. Many Eminent speakers have shared their thought on changing paradigm of IT sector. In Exhibitions, more than 50 Global Companies came with new Ideas and Products.In Convergence India 2017 students have got opportunity to know about innovative products of different Companies like CISCO, D-Link, Multilink Pvt Ltd, My Box Technologies Ltd, TCS and many more.
- CSE,FET, SGT University organized an Industrial visit to "Doordarshan Bhavan", New Delhi on 24th March 2017. Twenty- Two students & Faculty member Mr. Yogesh Kumar and Ms. Reenu from CSE Department visited the site.The objective of this industrial visit was to create awareness among the students about the basic principles of T.V. broadcast and satellite communication and other practical concepts in a transmitter station.During this visit, students got an opportunity to know the technical details of Satellite Coverage, broadcasting of the TV Channels, broadcasting techniques, ground transmitters ,sound and video controller etc.The trip was good for our students.

Other Events

- Department of Computer Science and Engineering, FET, SGT University hosted the certificate distribution ceremony of Short Term Course on "Open Source Technologies" which was conducted in collaboration with NITTR Chandigarh on 2nd March 2016.
- Advanced C course from B.Tech 4th Sem and Advanced Java for B.Tech 6th Sem have been conducted through Spoken Tutorials (IITB).Examination of Certification will be ld on 11th, 12th March 2016.
- Department of CSE, Faculty of Engineering & Technology, SGT University was organised 'Microsoft Day' on dated 30/9/2016. It' was an awareness programme on latest Technologies of Microsoft
- Faculty of Engineering & Technology, SGT University organized a one day event "Microsoft Imagine Camp" on 16th March, 2017.Microsoft Team - Mr. Venkatesh Sarvasiddhi, Head-Academic Initiative, Ms. Vinnie Jauhari, Director Education Microsoft, Ms Simran Dawar, Manager – Microsoft Surface Team, Mr. Ashish Gupta, Senior Product Marketing Manager for Education, Mr. Nitin Pandit, Microsoft MVP, Ms Tara McCartney presented impressive

presentation on topics such as Microsoft Education Ecosystem, Surface Window Devices move to cloud getting started and Productivity in Education in this one day event. More than 350 students from SGT University and other institutes have attended this event. Pro Chancellor, Dr. T D Dogra, Management Advisor, Dr. Bajpayee, Director General, Mr. Rajiv Mishra graced the event. The event started with lamp lighting ceremony followed by National Anthem. Dr. Bajpayee, on behalf of the SGT University welcomed the dignitaries from Microsoft, other Guests, HODs, Faculty members and students. He advised the students to learn as much as they can and to ask relevant questions. All the students ware captivated by the presentation made by the Microsoft team. They interacted with the speaker and cleared their doubts. Microsoft Team distributed goodies to who so ever could give correct answer to the queries put forward by them.

34. Changes in Teaching Guidelines. (List the teaching methods adopted by the faculty for different programmes.)

- a) Project Based Learning (PBL) /Integrated Teaching
- b) Problem Based Learning/Case Studies
- c) Students Seminar
- d) Group Discussion [Spot GD and Focussed GD]
- e) Students Interactive Session (SIS)

35. Changes adopted in monitoring learning outcomes

36. Extension activities.

37. "Beyond syllabus scholarly activities" of the department Excursion Visit, Sports day, TechFest-2016

38. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strengths

- Well qualified and experienced faculties
- Research oriented mindset
- Commitment to continuous learning

Weakness

• Relatively lower strength of students but we are strongly motivated to improve on it **Opportunities**

- Inter-departmental activities
- Setting up of various Centres of Excellence

Challenges

- Keeping continuously updated with emerging trends and technologies
- Maintaining the high levels of motivation of students

39. Best Practices of the department

- Punctuality of teaching and non-teaching staff
- Active participation in research and faculty development activities
- Regularly organized workshops and guest lectures
- Implementation of innovative teaching methodologies such as project based learning, student interactive sessions, seminars, group discussions, etc.

40. Future plans for the department

- a) To equip faculty with more technical and teaching skills.b) To make students more employable.
- c) To retain faculty for a longer time with us.
- d) To establish more Academic –Industrial Partnership.
- e) Try to take funding for project from various agencies.