

The college has entered into MOUs with industry for organizing different activities for overall improvement of the students. The department has entered into following MOUs.

SNO	Name of the Industry	Date of MOU	Activities
2	Infosys	25-2-2010	<ol style="list-style-type: none"> 1. Industrial visit organised to Infosys on 09/09/2014. 56 students and 3 faculties participated. 2. Infosys requested to include industry elective “Big Data and Analytics” and it is approved by BOS committee members on 24/06/2015. 3. Two faculties from the CSE department, Harshitha R and Rekha G S had been deputed for Faculty Enablement program on “Big data and Analytics” from 10th August 2015 to 14th August 2015 at Bangalore. 4. Renewal of MOU with Infosys on 18th September 2015. 5. Expert Lecture by Infosys team for CSE students on 10/06/2016 6. Industry Elective “Big data Analytics “ was proposed by Infosys for CSE curriculum during July 2016.
3	TCS	20-3-13	<ol style="list-style-type: none"> 1. Three faculty attended FDP on Academic Interface program by TCS on 13 -14 March 2014 at TCS campus 2. CS cluster faculty evaluated the NANO Videos created by MOOC Team of TCS [29.09.15] 3. Industrial visit to TCS conducted on 19/02/2015 4. Two days Project Management Workshop organized by CSE Dept for PG Students on March 11th and 12th March 2016. 5. Industrial visit to TCS conducted on 6/10/2017

4	SAP Labs	16.03.12	<p>1. One Day Workshop conducted on “Design Thinking” on 6th September, 2014 at BMSCE</p> <p>2. Industrial Visit to SAP Labs was arranged on 30th September, 2014.</p> <p>3. One day workshop on Code Jam focused on Java based development on SAP HANA Cloud Platform using Eclipse IDE held on 31st October 2014.</p> <p>4. A one day visit to Technical event on SAP Techniversity on 12th February, 2014 at BIEC, Bangalore</p> <p>7. Industrial visit conducted for CSE students on 31st Sept 2014</p> <p>5. Two Students won the National level AppRumble 2015 competition and were awarded Rs one Lakh prize. They got a call from SAP USA for implementing this project.</p> <ol style="list-style-type: none"> 1. Suraj Jayakumar 2. Rowa Menezes <p>6. Four Students completed Internship at SAP labs during feb –May 2015</p> <p>7. Hands on session of SAP HANA Cloud Platform based on Java using Eclipse IDE 27th January 2015</p> <p>8. SAP Techniversity 12th March 2015</p> <p>Code Jam focused on Java based development on SAP HANA Cloud Platform using Eclipse IDE 21st August 2015</p> <p>9. Build the Talent of the Future for the Digital Enterprise-Industry 4.0 -one day workshop attended by two faculty from CSE at SAP lab 25th November 2015</p> <p>10. Design Thinking workshop organized with SAP experts 20th September 2015</p> <p>11. Industry Visit to SAP campus 10th March 2016</p>
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I. Partial Technical Support for Laboratories

In the department for the following two labs, partial technical support has been received from industry. The details are shown in table 2.2.1.4-1

Table 2.2.4-1: Partial industry support for the Laboratories

Sl.	Name of the Laboratory	Name of the Company	Technical support obtained from
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No.			industry
1	Wireless Communication Laboratory	ARTIS Technologies & Service, Kundapur	Flow code version-6 Software
		S2S UniTech Pvt. Ltd., Gundanjaddi, Harigadde, Hitlalli Post Yellapur Uttara Kannada	Technical Support in Wireless Communication
2	Centre of Excellence “Sensor Networks and Big data and Analytics”	Intel through Academic Alliance	Intel Galileo Boards Twenty boards were donated by Intel

II. Industry interaction with respect to Course design and Faculty Enablement Program

The Department of Computer Science and Engineering has tie up with Infosys Limited, Bangalore. Courses are rolled out for different semesters with an agreement with Infosys. The company interacts with respect to curriculum content and makes suggestion how best it can be designed and delivered. It also trains the faculty members for the courses to be taught and provide insight on the classroom delivery innovatively. Continuous Webinar, Roadshow, Faculty Enablement workshop are organized by Infosys in association with the college. Faculty after the training, have conducted value added courses and also workshop before the commencement of the course to have better hold on the subject content.

Table 2.2.4-2, provides the participation and activities organized by Infosys Limited, Bangalore. Webinar was organized for faculty and students whereas FEP and workshop was organized only for faculty

Table2.2.4-2: Faculty participation in the activities conducted by Industry

SL No	Faculty Enablement Program (FEP)		Webinar		Workshop	
	Date	Topic	Date	Topic	Date	Topic
1.	10 th Aug 2015 to 14 th Aug 2015	Faculty Enablement Program on “Big Data and Analytics”	8 th Sept 2016	Agile Software Development	4 th to 6 th Jan 2016	Train the Trainer Program on “Python Programming Fundamentals”

Table 2.2.4.-3, represents the courses offered by the department. The curriculum for these courses was designed by interaction with Infosys.

Table 2.2.4-3: Courses designed by Interaction with Industry

SI No.	Course offered	Semester	Company Name
1	Building Enterprise Applications	7	Infosys Limited, Bangalore
2	Big Data and Analytics	7	Infosys Limited, Bangalore

III. Industry interaction with respect to BoS

Department BOS (Board of Studies) consists of 6 internal department faculties, 3 external academicians and 2 experts from industry. For program design (curriculum) all the members are involved and inputs from industry experts are considered. BOS meetings happen yearly once or whenever changes in the program curriculum design is required. Details of BOS meetings conducted are provided in the Table: 2.2.4-4

Table 2.2.4-4: BOS Meeting details

SL. NO	DATE	INDUSTRY PERSON	AGENDA
1	5-6-2014	Mr Praveen N Palasundram, IBM. Mr. Karthik G R, NetApp	Finalization of scheme and curriculum for C programming course for I-II sem. From academic year 2014-15
2	24-6-2015	Dr. Rajan M A, TCS-ab Mr. Shashank Woontakal, Akamai	Scheme for 3 rd to 8 th sem. CSE-ISE cluster curriculum for 3 rd and 4 th sem. CSE-ISE cluster
3	24-02-2016	Dr. Rajan M A, TCS	Scheme for 5 th to 8 th sem for 2016-17,2017-18
4	03-06-2016	Dr. Rajan M A, TCS-ab Mr. Shashank Woontakal, Akamai	1. Approval of the Draft Scheme and curriculum of 5th to 8th Semesters of CS-IS 2. Approval of CO - PO Mapping 3. Any other related matter

During BOS meeting held on 24-2-2016, industry expert Dr.Rajan from TCS suggested following points

- To make use of research papers for subjects like IOT as textbooks are not available.

Course handling faculties have referred various related research papers specifications and based on that hand notes are prepared and distributed to students.

- Activity based or case study based teaching for software engineering subject should be adopted.

Followed activity based teaching process for the course software engineering.

- To change the methodology of asking student to write a program

Based on the suggestion given by Dr. Rajan, in the internal tests for programming subjects, the erroneous code was given and students were asked to identify the errors.

Some of the students have participated in various coding competition like hackathon, codechef etc. this improves their skill in identifying errors in the code.

-Include course on 'R' and python, and elective subjects like Multicore Architecture and Programming, Software Testing, Cyber Forensics, Fuzzy Logic.

As per his suggestions, related subjects like 'R' and Python, Multicore Architecture and Programming, Software Testing, Cyber Forensics, Fuzzy Logic were included in the curriculum.

IV. Industry interaction with respect to student scholarships

During academic semester Jan-May 2017, to encourage student learning Huawei Technologies Co. Ltd awarded scholarship to the following four CSE students:

1. Siddharth Dias-8th semester
2. Uday N -6th semester
3. Sai Prasad K- 4th semester
4. A S Karthikk- 4th semester

The criteria considered for award of scholarship was CGPA and overall annual income of the student's family. For each of the student a scholarship of Rs. 50,000/- was awarded.

V. Industry interaction with respect to delivery of Expert lectures /workshops to students

Eminent personalities from industry have given technical talks/workshops to students on recent technologies to enhance their knowledge and to be aware of current trends in the industry. Following is the list of technical talks/workshops given by industry experts.

Table 2.2.4-5: List of Technical talks / Workshops given by Industry experts

Sl.no	Date	Title of the Event	Resource person
1	06-09-2014	Design Thinking	Mr. Jatin Bhasin ,SAP Labs, BANGALORE
2	07-09-2014	Introduction To Python	In association with CampusHash, Sanket Saurav and Liyas Shirol
3	08-09-2014	Ethical hacking and network security	Vijay Chandra Togiti, Vikas Kumar, Siddhartha From Hacker School Pvt Ltd, Bangalore
4	08-09-2014	Adobe Tools In Web Development Space	Mr. Abhijith Ghosh, Adobe, Bangalore
5	20-09-2015	Design thinking	Chiranjeev Brahma, Country Manager, SAP Labs
6	23-09-2016	Current Trends And Opportunities In IoT	Dr. Hemant Rath Senior Member IEEE and IARCS, Senior scientist at TCS Research and Innovation Dr. VighnarajPanigrahi, Researcher at TCS Research Center Dr. Rajan M Ascientist at TCS Research

7	23-09-2016	IoT and its Applications using Arduino	Harish Babu, CDAC
8	24-09-2016	Android App Development Embedded with IoT	Vishwa Kiran, Pushkala Technologies Private Limited
9	23-09-2016 and 24-09- 2016	Understanding Business Architecture In IoT Context	Mr. Vinu Jade, Enterprise Architect
10	23-09-2013 to 29-09- 2013	Workshop on Issues of IPV4 and IPV6	Mr.SandeepRao, CISCO
11	24-10-2013	Workshop on C Programming Essentials for Interview	Mr.Bhushan&Mr.MohammedSikhander, Crane Software
12	09-11-2013	Workshop on Networks and Beyond	Mr.Ananthan M.S., CISCO
13	28-11-2013	RAD Certification	Mr.Yogesh Sharma, IBM-AI
14	03-02-2017 to 04-02- 2017	Workshop on Artificial Intelligence	Sourabh Bhardwaj Shubham Nagar, TechieNest