COMPUTER DEPARTMENT

"Technology gives the quietest student a voice"

-Jerry Blumengarten

Mission

1. Impart excellent education, necessary skills, training and experimentation capabilities in the field of computer science and engineering.
2. Create a vibrant and an intellectually stimulating environment for students to promote innovative and multidisciplinary real world problem solving.
3. Develop women professionals and imbibe work ethics and leadership skills in them, thereby helping them pursue successful career and contribute to science and technology.
4. Collaborate with industry and other universities to help create competent computer professionals.
5. Strive to fulfill the expectations of all relevant stakeholders.

Program Educational Objectives (PEOs)

1. To prepare students for academic competence, to be employed as computer professionals, for industry, higher studies, research, entrepreneurship and to significantly contribute to the society at large.
2. To develop students' fundamental knowledge related to mathematics, science, computer science, computer engineering and to make them capable of providing solutions to challenging problems and multidisciplinary problems.
3. To enrich students with soft skills, leadership skills, professional skills and work ethics to make them good computer professionals and role models for future generations.
4. To prepare students capable of self-learning, to have the ability to adapt to changes and to possess the ability to understand the impact of engineering on society and humankind.

Program Specific Outcomes (PSOs)

1. Graduates capable of working in various domains, solving problems by applying knowledge and skills from Software Development, Networking, Databases, Internet of Things, and Embedded systems.
2. Graduates capable of developing, maintaining software services, software products and embedded systems by applying the entire software development life cycle.
3. Graduates capable of communicating effectively and understand and implement client requirements in various domains with a realistic view of all constraints and sustainability.
4. Graduates capable of pursuing successful careers in industry, higher studies, research, and expected to adapt and contribute to ever-changing and evolving trends.

Best outgoing student

Nidhi Sakhala was selected as the best outgoing student for the class of 2017.

Citi Bridge Program - 2017

Citi Bridge program was a 100 hours program designed by Citicorp for the third year Computer and IT students of Cummins College. It involved 50 hours of classroom sessions on different topics like the banking domain, Object Oriented Programming, Database concepts, AngularJS and few sessions on soft-skills. Out of the 100 student shortlisted for the Citi Bridge program, 86 students were from Computer department and 14 were from the IT department.

The students were divided into 20 teams. Each team was given a problem statement which they implemented under the guidance of their Citi mentors. The teams presented their solutions in front of the Citi panel. The top three teams with the best solutions were awarded.
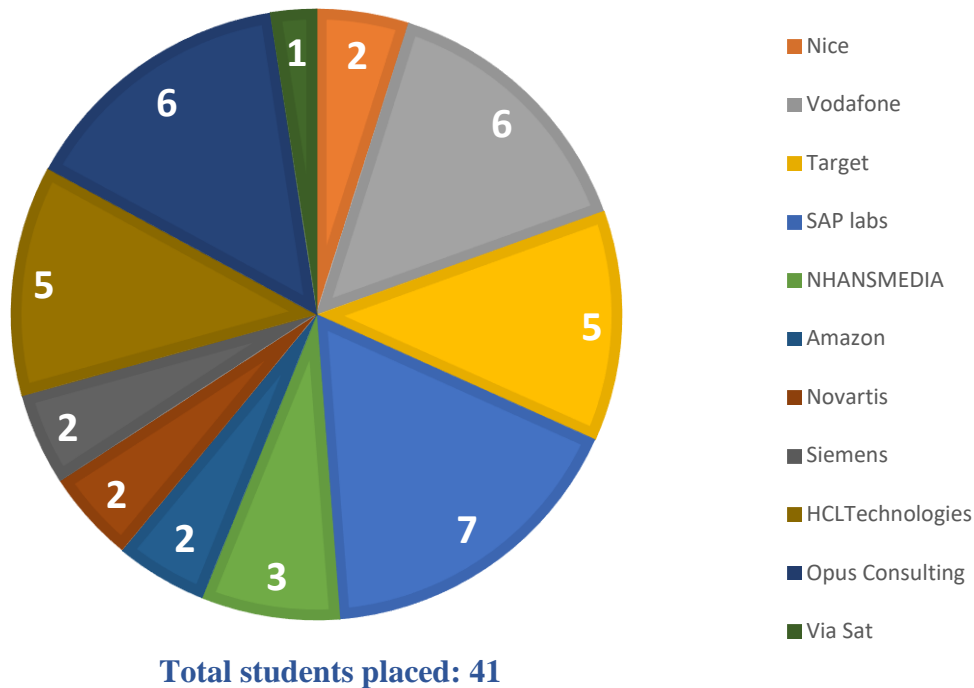
The winning team was from the Computer department. The team members were- Ms. Kanika Narang, Ms. Ambica Deshpande, Ms. Sonali Jha, Ms. Aneri Rana and Ms. Rasika Kshirsagar.

Project Competition winners

- Kaveesha Shah, Alisha Joshi, Pratima Lunkad and Laxmi Garde won first prize for their project "Data Security for IoT devices using Key Lifecycle Management" in the event "Vishwacon" organized by VIIT, Pune. They also won first prize for the same project in "Innovation" organized by MKSSS's CCOEW, Pune as well as first prize in the event "Texephyr" hosted by MIT.
They won a second prize in the event "Convene" organized by SKNCOE, Pune.
The same group also won a third prize in the event "IAEERAP" organized by I^2IT, Pune.
- Janhavi Nikumbh, Namrata Kulkarni, Vaishnavi Mysore and Shruti Hulgeri won a second prize in a project competition hosted by PVG for their project "Visualization of Key Thought Leaders (KTL's) on Google map." They also won a second prize for the same project in a project competition organized by MMCOE, Pune.
- Nain Vaswani, Ritu Varma, Devika Walavalkar and Saiprashanti Mukherjee reached university level for their project "A real-time smart inhaler system for remote monitoring of the asthma patients based on dosage tracking and environmental conditions" in the event "Avishkar" organized by University of Pune.

PLACEMENTS 2016-17

TOTAL PLACED FROM COMPUTER DEPT.

Legend:
- Nice
- Vodafone
- Target
- SAP labs
- NHANSMEDIA
- Amazon
- Novartis
- Siemens
- HCLTechnologies
- Opus Consulting
- Via Sat

Total students placed: 41

Co-curricular activities

- Alisha Joshi, Kaveesha Shah, Pratima Lunkad, Laxmi Garde got "Best Paper Award" in the "Vishwacon 2016-17", International Conference organized by VIIT, Pune. They won 1st Prize in "Innovation2k17", national level event organized by MKSSS CCOEW, Pune too.
- Namrata Kulkarni, Janhvi Nikumbh, Shruti Hulgeri received First Prize in "DEXTERITY 2k17", a national level event organized by MMCOE, Pune and second prize in "Algorythm 2017" University level event organized by PVG's COET, Pune.
- Ananya Roy, Mugdha Khedkar, Jui Shinde received Second Prize in "Melange17" intercollegiate event organized by VIT, Pune.
- Sonali Parihar won Second Prize at "Ideate 2030", an intercollegiate level technical competition organized by Modern College, Pune.
- Sonali Parihar is also a winner of "Technomania", an intercollegiate level technical competition organized by CCOEW, Pune.
- Sakshi Pargaonkar, Kshitija Patel and Tanisha Shrotriya participated in the National Robotic Contest "ROBOCON 2017" organized by MIT, Pune.
- Manali Kale secured the first place in the event 'Code To Hunt' competition at "Innovation 2k17" organized by MKSSS's CCOEW, Pune.
- Manali Kale was the winner of the event 'CODE ON'

held by Code Club.
- Nishtha Bhawsinka secured the third place in the event 'Code To Hunt' at "Innovation 2k17" organized by MKSSS's CCOEW, Pune.
- Nishtha Bhawsinka gave an exemplary performance in National Creativity Aptitude Test (NCAT) in June 2016 and won the scholarship in the same. She has secured All India Rank 1 in category 1.

Extra-curricular activities

- Sakshi Dhokrat received Gold Medal in district level Carom competition organized by MKSSS CCOEW, Pune.
- Akhila Joshi served as an Assistant Director in the UN Women at the Global Leaders Summit 2017.
- Arshiya Sayyad was selected as College representative of E-Cell at IIT, Bombay.
- Shivani Bhoite received a first prize in Football-women, in a national level sports competition "Zest 2017" organized by COEP, Pune.
- Shivani Bhoite received second Prize in Summit16(Football), national level competition organized by MIT, Pune in September 2016.
- Shivani Bhoite received a second prize in Handball-women, in a national level sports competition "Zest 2017" organized by COEP, Pune.
- Krisha Chitnis was second runner-up in "Voice of Pune", an intercollegiate level competition organized by VIT, Pune.

- Minal Gupta was winner of Volleyball intercollegiate level Sports Competition -"Damini" organized by MKSSS'S CCOEW, Pune.
- Minal Gupta was runner up of Cricket Intercollegiate level Sports Competition- "Zest" organized by COEP, Pune.
- Minal Gupta was also the winner of Volleyball intercollegiate level Sports Competition -"Damini" organized by MKSSS'S CCOEW, Pune.
- Priyanka Parate has become a 'Young Peace Ambassador' after completion of her three week Wholesome Leadership Development Program- Gloucestershire - U.K.
- Chinmayi Ghure secured third place in intercollegiate level Football (Women) tournament.
- Chinmayi Ghure was also a winner in Football (Women) event in "ZEST 17" organized by COEP, Pune.
- Sakshi Sonawane was runner up in Football (Women) event in "ZEST 17" organized by COEP, Pune.
- Sakshi Sonawane was also runner up in Javelin throw event in "ZEST 17" organized by COEP, Pune.
- Sakshi Sonawane was awarded best player in Football event "Ashwamedh 17" organized by AISSMS, Pune.
- Soha Agrawal was first runner up in Yogasana event in "Damini 17" organized by MKSSS, Pune.
- Also, Soha Agrawal was first runner up in Suryanamaskar event in "Damini 17" organized by MKSSS, Pune.
- Shevi Jain won the following prizes in different competitions:-
  - Winner of Table Tennis at intercollegiate level "Zest" organized by COEP, Pune.
  - Runner up of Chess Competition at intercollegiate level "Zest" organized by COEP, Pune.
  - Runner up of intercollegiate level Table Tennis competition at Summit organised by MIT, Pune.
  - Runner up of Table Tennis and Chess Competition at Intercollegiate level "Damini" organised by MKSSS'S CCOEW, Pune.
  - Winner of intercollegiate level Table Tennis competition at "Melange 17" organised by PICT, Pune.
  - Winner of intercollegiate level Table Tennis at "Panache" organised by HNIMR, Pune.
- Gauri Chaware won intercollegiate level Basketball Competitions at:-
  - Inter-zonal Basketball competition organised by SPPU
  - Summit organised by MIT, Pune.

- "ZEST" organised by COEP Pune.
- "Pentacle" organised by MKSSS'S CCOEW, Pune.
- "Damini" organised by MKSSS'S CCOEW, Pune.
- "Elevate" organised by PICT, Pune.

Faculty Achievements

1. Mr.Mahendra Deore was selected as top performer of the programme where he was amongst the top 383 out of 4051 participants it was a four week Faculty Development Program on " Use of ICT in Education for Online & Blended Learning this program was conducted at IIT Bombay in July 2016.
2. Mrs. Vaishali Salgar received CSI Award for "Longest Continuous SBC" for year 2015-2016 in the month of December 2016.
3. Mr. Prakash Date completed M.E. in March 2017 from D. Y. Patil COE, Pune.

Faculty as a Resource Person

1) Dr. Sunita Jahirabadkar was the Session chair for CPGCON 2017 at Sandip Foundation's Sandip Institute of Technology and Research Centre(SITRC), Nashik.
2) Mrs. Chhaya Gosavi was a resource person for 1-day FDP on "Programming Languages" organized by MMCOE, Pune with SPPU on 16th December 2016.
3) Mrs. Rakhi Dongaonkar was a resource person for "Faculty Orientation Workshop on SE E&TC/Elex Revised Syllabus 2015 Course" at Wadia College,Pune on 15th December 2016.
4) Mrs. Varsha Pimprale was a resource person for Computer Graphics for the Second year students at RMD, Sinhagad School of Engineering, Warje on 23rd January 2017.
5) Mr. Hitendra Khairnar was the Member for drafting the subject contents for 'ME IT 2015 Syllabus" (SPPU, Pune) on 23rd January 2017.
6) Mrs.Chhaya Gosavi was a resource person for "Data Structures and Files" for Second year IT students and the revised syllabus of TE IT 2015 course on 9th February 2017 at Amrutavahini College of Engineering, Sangamner.
7) Dr. Supriya Kelkar delivered a lecture on "Memory Management in Unix Operating System" at NBN Sinhgad College of Engineering, Pune on 3rd February 2017.
8) Dr. Supriya Kelkar delivered a lecture on "Embedded Computing System – a Designer's Challenge" for TE(ENTC) students at NBN Sinhgad College of Engineering, Pune on 3rd February 2017.

Faculty Research Publications

1) Mrs. Shubhangi V. Tikhe and Mrs. Anjali Naik published a paper titled- "Multipoint Search Algorithm for automatic segmentation of tooth from

digital intra oral periapical radiographs" in the June 2016 issue of the Indian Journal of Science and Technology(Vol: 9 Issue: 21).

2) Mrs. Anjali Naik and Mrs. Shubhangi V. Tikhe published a paper titled- "Automatic Segmentation of lower jaw and mandibular bone in digital dental panoramic radiographs" in the June 2016 issue of the Indian Journal of Science and Technology(Vol: 9 Issue: 21).

3) Mrs. Anjali Naik and Mrs. Shubhangi V. Tikhe published a paper titled- "Designing a feature vector for statistical texture analysis of Mandibular Bone" in the September 2016 issue of the Indian Journal of Science and Technology(Vol: 9 Issue:33)

4) Mrs. Shubhangi V. Tikhe and Mrs. Anjali Naik published a paper titled- "Classification of Digital intra oral periapical radiographs by selecting a feature vector using hybrid method for selection of feature" in the September 2016 issue of the Indian Journal of Science and Technology(Vol: 9 Issue: 33).

5) Mrs. Neeta Maitre published a paper titled - " Prediction of Bacterial Infection in cotton using expressed Sequence Tags." in October 2016 issue of IJPCBS. (Vol: 6 Issue: 4)

6) Mrs. Neeta Maitre published a paper titled - " Expressed Sequence Tags and Gene Prediction." in December 2016 issue of IJIET. (Vol: 7 Issue: 4)

7) Mrs. Madhuri Tasgaonkar published a paper on "Morphological Profiles for Microaneurysm Detection in diabetic fundus images" in the Conference on Signal and Information Processing (IConSIP2016) at SGGS, Nanded in October 2016.

8) Mr. Ravikiran Holkar published a paper on "identification and Classification of Cotton Plant Leaf Diseases using Image processing techniques." in November 2016 at International conference on Separation Processes(ICSP 2016).

Faculty Development workshop on IoT

Department of Computer Engineering organized a BCUD, Savitribai Phule Pune University sponsored, two days state level Faculty Development Workshop on "Internet of Things (IoT), Analytics, Computing Techniques and Tools for Smart Cities" on 17th and 18th February 2017. More than fifty faculty members from all over Maharashtra attended this Faculty Development Program (FDP). IoT and analytics are increasingly becoming dominant fields in computing world for academicians, researchers, as well as for industry and society. IoT and Analytics enable rapid creation and deployment of new applications based on sensors, devices, people, and software. Further, there is an emerging need for cities to be equipped with basic infrastructure to give a decent quality of life in India. IoT can be very aptly used to develop new systems or applications in Smart City development. Hence, through this Faculty Development Program, we tried to provide exposure to various issues, challenges and computing techniques involved in Smart City implementation as well as to major aspects of IoT, Analytics, and Computing. Various exclusive sessions on these topics by top level industry experts/researchers were held during these two days. They all discussed various real world applications as well case studies which surely disclosed the big picture of smart city implementation. A keynote session on "General perspective of Smart City" was conducted by Mr. Adesh Gokhale (IBM, Pune). Mr. Sunil Desai from Maven Systems discussed "IoT Architecture, Framework, Applications, challenges, etc." Another keynote session was on " Analytics for Smart City Development " by Dr. Mukta Paliwal who is working for Smart City project of Persistent Systems, Nagpur. Mr. Partha Roy from Tech Mahindra, Pune discussed opportunities, issues, challenges, technologies involved etc. regarding big data analytics in smart city implementation. The FDP was concluded with the session on " Future directions in IoT, Analytics, Smart City implementations towards Research Opportunities as well as student projects" by Dr. Parikshit Mahalle who is Professor and Head of Dept. Of Computer Engineering, Kashibai Navale College of Engineering, Pune. Two hands-on or laboratory sessions were also organized during this program. Mr. Prasanna Marathe, Mr. Umesh Jaiswal and Mr. Vinit Duragkar from Persistent Ltd. Pune presented a demo on Node-Red and also conducted a lab session on IBM Watson platform which is being used in developing IoT applications for smart cities. Another lab session on "Developing a small Analytics application using R" was conducted by Ms. Sonali Patwe from IBM, Pune. All these sessions were highly appreciated by the faculty members attending this FDP. This FDP definitely served as a platform to interact on cutting edge technologies in IoT and Analytics related to smart city development for faculty from various colleges in Maharashtra, research scholars as well as industry experts.

Workshops attended

1. Dr. Sunita Jahirabadkar attended a workshop on "One Week Public Training Program on " Indian Patenting Procedures, Patent Proceedings, Patent Specification Drafting & International Patent Filing Procedure" from 21st Nov 2016 - 25th Nov 2016 at Rajiv Gandhi National Institute of Intellectual Property Management, Nagpur.

2. Mrs. Madhuri Tasgaonkar and Mrs. Sheetal Barekar

attended a FDP on "One day Faculty Development Program on "Microprocessor" (2015 Course) on 13th Dec 2016 at Department of Comp Engg, PCCOE&R, Pune.

3. Mrs. Sakshi S. Mandke , Mrs. Soudamini R. Patil and Mr. Prakash Date attended a FDP at MIT, Pune on 14th Dec 2016 on "Advanced Data Structures SE(2015 revised course)" it was a One day faculty development program whose certificate is yet to be received from the college.

4. A FDP was attended by Mrs.Rakhi A.Dongaonkar on " Principles of Programming Languages SE(2015 revised course)" at MMCOE,Pune on 16th Dec 2016.

5. Mrs. Varsha Pimprale, Mrs. Rajashri Kulkarni, and Mrs. Vaishali S. Salgar attended a FDP on 21st Dec 2016 which was a One day faculty development program on "Computer Graphics SE(2015 revised course)" at NBN SOE, Pune.

6. Mr. Ravikiran Holkar,and Ms.Abha Mishra attended a FDP on 23rd Dec 2016 which was a One day faculty development program on " Microprocessor Laboratory (2015 Course)" at College of Engineering, Pune.

7. A seminar was attended by Mr. Ashutosh Muchrikar, and Mrs. Aparna Hajare on "Current Trends in Computer Science Research " which was held on 2nd Jan 2016 at MIT, Pune.

8. Mrs. Nutan Deshmukh, Mrs. Varsha Pimprale, Ms. Sushila Shelke, and Mr. Mahendra Deore collectively attended a one week STTP on " Network System Administration & Security" from 8th Mar 2017- 12th Mar 2017 at COEP, Pune.

Guest Lectures

1. Mr. H. S. Khairnar arranged a lecture on "Problem Solving with Gamification" the session was conducted by Siddhesh Bhobe, CEO, eMee , Center Head (Pune), Persistent for BE students on 30th June 2016.

2. Dr. Sandhya Arora arranged a Talk on "Banking 2.0" by Mr. Himanshu Warudkar, Director – India Digital Office, Barclays Technology on 22nd July 2016 for the third year students of computer department.

3. Dr. Sandhya Arora arranged a Talk on "Trends in Advanced Computing" by Honorary Professor L. M Patnaik Dept. Of Electronic System Engineering, IISC Bangalore on 25nd July 2016 for BE computer students.

4. Dr. Supriya Kelkar, Mrs. Aparna Hajare organized a lecture on "OS fundamentals and Scheduling" on 29th August 2016 by Dr. Abhijat Vichare, Consultant, Faculty at PCI (Persistant Computing Institute) for TE computer students.

5. Mrs. Vaishali Salgar Mrs Archana Ogle arranged a session on "Cyber Security" conducted by Mr. Sanjav

Panmand, Cyber Cell , Pune Police on 7th September 2016 for the third year students.

6. Mrs. Rakhi Dongaonkar Mrs. Soudamini Patil arranged lecture by Dr. Sharad Saxena Senior Analytical Training Consultant in SAS Global Mr. Manoj Singh Senior Analytical Training Consultant in SAS Global on "Machine Learning" for TE computer students on 13th September 2016.

7. A "Contextual Text Mining and Natural Language Processing" session conducted by Dr. Yashodhara Haribhakta, Associate Professor, Department of Computer Engineering of IT, College of Engineering, Pune was arranged by Dr. Sunita Jahirabadkar and Mrs. Pranjali Deshpande on 29th September 2016 for the BE students of computer department.

8. Mrs. Pranjali Deshpande arranged Mr.Purushottam Ekande's lecture who is a Computer Vision consultant on "Speech Processing" dated 29th September 2016 for all BE computer students.

9. Dr. Sunita Jahirabadkar and Mr. H.S. Khairnar arranged "Data Management (BI)" lecture by Ms. Deepti Charankar on 13th February 2017 for all BE computer students.

10. Dr. Sunita Jahirabadkar and Mr. H.S. Khairnar arranged a lecture on "Analytics (BI)" by Mr. Manoj Singh and Ms. Suchitra Chikhalkar on 14th February 2017 for BE Computer students.

11. Dr. Sunita Jahirabadkar and Mr. H.S. Khairnar arranged a session on "Reporting (BI)" conducted by Mr. Unnikrishnan Menon on 27th February 2017 for BE Computer students.

12. Dr. Sunita Jahirabadkar and Mr. H.S. Khairnar arranged a session on "Case Study (BI)" conducted by Ms. Deepti Charankar, Ms. Suchitra Chikhalkar, and Mr. Unnikrishnan Menon on 28th February 2017 for BE Computer students.

13. Mr. S. P. Mengale, Mr. M. P. Deore, and Mrs. A. U. Hajare arranged Qaidjohar Zoeb Jawadwala, IT Consultant's lecture on "Computer Networks" on 9th February 2017 for all TE students.

14. Dr. Sandhya Arora Mr. H.S.Khairnar and Mrs. Sushila Shelke arranged a session on "Principles of Concurrent and Distributed Programming", which was conducted by Mr. Suraj Chavan IT Department for all TE Computer students.

Faculty co-ordinators:
Mrs. S. V. Tikhe
Mrs. S. S. Mandke
Mrs. S. R. Patil

Student co-ordinators:
Rasika Kshirsagar
Vaishnavi Iyer
Chaitali Ghag
Nikita Nikale