

COMPLIANCE TO UGC QUALITY MANDATE

S. No.	Quality Mandate	Compliance Status
1	Induction Program for Students	A mandatory two week orientation program has been conducted for all the first year students since last three academic years i.e. 2018-19, 2019-20 and 2020-21.
2.	Learning Outcome-based Curriculum framework - Revision of Curriculum at regular intervals	Since its inception, the University has followed Outcome based Course Curriculum. The revision of Curriculum is carried out at regular intervals to ensure that the Objectives and Outcomes are relevant and updated with current times. New courses are introduced from time to time to keep the students updated with the latest technological developments and research.
3.	Use ICT based Learning Tools for effective Teaching-Learning Process	All class rooms are ICT enabled and all teachers use ICT resources. JUIT has ERP. The whole campus is Wi-Fi enabled and the academic block, hostels, residential accommodation have access to high speed broad band connectivity.
4.	Soft Skills for Students	Soft skills play an essential role in shaping the careers of students and go a long way in honing their communication skills in professional life. The University provides ample training programs/workshops and opportunities to the students to train and develop their soft skills.
5.	Social and Industry Connect	The University organizes awareness activities on diverse issues and through them sensitizes the faculty and students about their social responsibilities. Students are encouraged to participate in many interactive activities with Industries, thus enabling them to become aware of the real time use of technology at various fronts.
6.	Examination Reforms	The University has taken significant examination reforms for the B.Tech, M.Tech and Ph.D programs. Assessment through examinations ensures that students gain knowledge as per stipulated Course Objectives defined in the syllabus.
7.	Tracking of the Student's Progress after Completion of Course	JUIT values good student-teacher relationships. JUIT strives to keep track of its alumni. For the same, JUIT has a JUIT Alumni Cell (JAC) that links them via various platforms such as Facebook, Almaconnect, LinkedIn, Instagram. Alumni are encouraged to guide their juniors through regular interactions & talks.
8.	Induction Training for all new Teachers, and Annual Refresher Training for all Teachers	The University conducts induction program for the newly inducted faculty and staff whereby they are introduced and briefed on various aspects of the University. Various Departments of the University conduct Faculty Development Programs and

		Workshops, where the faculty participates and interacts with eminent speakers that add to their wealth of knowledge and experience.
9.	Leadership/Management Training for all Educational Administrators	The Department of Humanities and Social Science has conducted consecutive 6 th , 7 th and 8 th workshops on Tools and Techniques for Data Analysis on June 19- 24, 2017; June 11 – 17, 2018; June 10 – 16, 2019, respectively for faculty and professionals. Prof. Sudhir Kumar has been a resource person for UGC-Refresher Course on Environment Conservation coordinated by UGC – Human Resource Development Centre of Guru Nanak Dev University, Amritsar (24 November, 2020). He was also a resource person for UGC-Faculty Induction Program for Faculty members newly inducted in various Govt. Colleges/Universities of India. This was arranged by UGC – Human Resource Development Centre of Guru Nanak Dev University, Amritsar (11 th December 2020)
10.	Promoting Quality Research by Faculty and Creation of New Knowledge	JUIT has made significant progress in encouraging Research and creating new knowledge. Total Publications: SCOPUS indexed Publications: 2402 (with articles and articles in press:1456; Conference Papers:766; Book Chapters : 60; Reviews:64, Others: 54) ; Citations: 20,963 (Source: SCOPUS), h-index: 51 Patents: Granted:-11; published:13; Filed:01 Completed Projects: 77 (worth Rs. 2010.14 Lakhs approximately) Projects in Progress: 05 (worth Rs. Rs. 272.02 Lakhs approximately) Consultancy: 01 Ph.D awarded:226 Ph.D submitted: 04 Ph.D enrolled:130 The faculty is actively involved in many research collaborations at national and international levels.
11.	Mentoring of non-accredited Institutions, so that every Institution can get accreditation by 2022.	The Department of BT & BI in association with HIMCOSTE has been approved for DBT Skill Vigyan Project (GOI), whereby the University is providing high quality hands on training of tools and techniques in the area of Biotechnology. The IPR Cell of JUIT, is working in collaboration with HP Patent Information Centre and offers IPR education through workshops. The cell is also actively involved in identifying GIs and imparting awareness to all stakeholders. The IPR cell in association with HIMCOSTE has conducted workshops and webinars to increase the overall knowledge and understanding regarding IPR.

UGC QUALITY MANDATE

The details of the initiatives taken by the University in compliance to UGC's QUALITY MANDATE

1. The Induction program of two weeks duration is conducted for the fresh batch of students. The groups are framed based on their programs. The group in charge and faculty members for each group coordinates the activities as per the schedule for each group. There is coordination by the Dept. for respective programs by the HoD. The induction involves introduction to the academic program, examination system, biometric registration, NAD registration, academic & disciplinary matters, medical facilities and an introduction to Jaypee Youth Club and its multifarious activities. This is followed by visits to the academic blocks and laboratories, Learning Resource Centre, hostels, gyms, Annapurna, health and sports facilities. There are campus walk around activities, nature walks, yoga sessions, sports events, Unnat Bharat Abhiyan visits to nearby villages, Swachta Abhiyan activities. The induction program involves screening of anti ragging UGC film, and talks by eminent experts on motivation, youth leadership, psychological counseling, training and placement, social entrepreneurship, TIEDC, adventure, sexually transmitted diseases etc. to name few of them. The induction is concluded with sharing the experience of induction program by groups of students and feedback for various parts of the activities of induction program.

2. **Learning outcome-based curriculum framework-revision of curriculum in regular intervals :**

The university since its inception has outcome based course curriculum. The revision of curriculum is carried out at regular intervals to ensure that the objectives and outcomes are relevant and updated with current times. The departments have designed the outcome based course curriculum with well defined course objectives and course outcomes followed by the contribution of Course Outcomes (COs) to the Program Outcomes (POs). The departments conduct board of studies meetings at regular intervals to review the courses. The revision in the course curriculum is carried frequently.

The University has adopted the choice based credit system and designed the courses and curriculum with an outcome based outlook. The University has adopted the new course structure with 160 credits in 2018 as directed by AICTE.

The new course structure and the detailed syllabi for B.Tech 2nd, 3rd and 4th year with 160 credits as mandated by the AICTE has been adopted w.e.f. 2018 batch/180 Credits (with additional certificate of Minor Area/Proficiency in approved stream).

The University amended the role of MOOC's against the elective courses up to the maximum ceiling of 5% of the total credit requirement for the batch. Now this facility has been extended against the Core courses for the students not able to complete the course requirement within 04 years against one/two left over

courses and this is beyond the maximum ceiling of 5%. The maximum limit of earning credit through MOOC's/Online courses shall be 10% of the total credits required for award of degree as per the UGC Gazette Notification No. 295 dated 19 July 2016.

The mapping of the MOOC's with the grading system of JUIT has been completed. In addition, the mapping of the Tampere University of Applied Sciences Finland with the JUIT grading system has been adopted. Under student exchange program with University of Florida USA, the grading pattern of University of Florida which follows the 5 point grading system has been mapped with the JUIT grading system where 10 point grading scale is followed.

The format of the feedback from the students for the various courses was altered. There has been an amendment in the condition for floating of subjects/courses for Summer Semester, changing the number of students required to register for the common and allied discipline to 10 students and for the core discipline to minimum of 05 students. There has been an amendment in the grade awarded for the improvement, wherein for the cases where the student has obtained grade lower than "D" grade after improvement, he/she will be awarded "D" grade.

The introduction of Minor in Computer Science and Engineering and Information Technology, Electronics and Communication Engineering, Civil Engineering and Biotechnology and Bioinformatics has been introduced with 20 additional credits and the detailed course structure for the same has been adopted in 2019. A course structure for proficiency in some streams of Computer Science and Engineering and Information Technology as per the specialization required by the industry has been adopted examples, Proficiency in Information Security, Proficiency in Data Sciences, Proficiency in Machine Learning, Proficiency in Computer Graphics, Proficiency in Big data and Visual Analytics, Proficiency in Image analysis and Processing, Proficiency in Cloud Computing, Proficiency in Artificial Intelligence etc. Open electives II and III for the 7th and open electives IV and V for the 8th semester students have floated with wide options.

A course structure for proficiency in some streams of Electronics and Communication Engineering as per the specialization required by the industry has been adopted examples, Proficiency in Embedded Systems, Proficiency in Communication Technology, Proficiency in Machine Learning, Proficiency in Signal Processing, Proficiency in Digital Image Processing, Proficiency in Microwave and RF Design etc. 05 new professional electives for B.Tech in Electronics and Communication Engineering for 2017-18 batches have been proposed, viz. Applied Artificial Intelligence, Control Systems, Microwave Components and Devices, Neural Networks and Embedded systems. The Department introduced new course Microwave Theory

and Techniques and clubbed the contents of Microwave components and Devices and Microwave Theory and Techniques. A new course Automatic Control System has been added in the 3rd Semester of B.Tech Electronics and Communication Engineering in accordance with the 160 credit scheme. The Department of Electronics and Communication Engineering has introduced new syllabus for the batch of Ph.D Scholars admitted in 2019-20.

A course structure for proficiency in some streams of Civil Engineering as per the specialization required by the industry has been adopted examples, Proficiency in Computer Aided Design, Proficiency in Building Design and Construction, Proficiency in Geotechniques, Proficiency in Water Management, Proficiency in Transportation Engineering, Proficiency in Construction Technology and Management *etc.*

A course structure for proficiency in some streams of Biotechnology and Bioinformatics as per the specialization required by the industry has been adopted examples, Proficiency in Industrial Biotechnology, Proficiency in Medical Biotechnology, Proficiency in Biomedical Informatics, and Proficiency in Systems Biology. The Department of Biotechnology and Bioinformatics has introduced course structure and detailed syllabus of M.Sc. (Biotechnology) and M.Sc. (Bioinformatics). The department has also introduced new elective courses to be offered to B.Tech (Biotechnology) and B.Tech (Bioinformatics) as professional Elective-IV and Professional Elective-VI for the 2018 batch onwards. The department has offered open electives like Biology for Engineers, Industrial Chemistry, Food Nutrition and Health Care, Sustainable Technologies for Waste Management for the Civil Engineering Students. The department included one elective with 03 credits in each 10th and 11th semester and in addition introduced an advanced lab course (Advanced Bioinformatics Lab) of 01 credit in the 10th semester in 2019.

The Department of Physics and Materials Science has introduced the compulsory science electives for the 5th semester B.Tech CSE, IT and ECE students under the new 160 credit scheme viz. Applied Materials Science and Science and Technology of Materials respectively. In addition to this the department has introduced new open electives for the 7th and the 8th Semester B.Tech students viz. Nanotechnology, Optical Fibre Network Design and Optoelectronic Devices. The Department of Physics and Materials Science has modified and revised the course contents for the course Biophysical Techniques. The department has modified the credits for the course Engineering Physics-II from 3-1-0 to 3-0-0. The department has also modified the course contents for the courses Engineering Physics Lab-1, Basic Engineering Physics-I and Basic Engineering Physics Lab-I. The department has changed the nomenclature of the course Biophysical Techniques. New course in Engineering Physics Lab-II (0-0-2) of 01 credit in 2nd

semester of B.Tech. CSE, ECE, IT and CE has been introduced by the Department of Physics and Materials Science.

New Courses have been introduced by the Department of Mathematics and the Department of Humanities and Social Sciences.

The Department of Computer Science and Engineering and Information Technology has introduced 05 new Elective courses and dropped 06 existing electives under the 160 credit scheme. The department of Electronics and Communication Engineering has changed the course titles of 11 courses for the B.Tech. 160 Credit scheme. The department of Civil Engineering has changed the eligibility criteria for M.Tech. (Environmental Engineering) with the inclusion of B.Tech (Chemical Engineering)/B.Tech (Environmental Engineering) as eligibility criteria towards admission to the same as is in practice in many other premier institutions. The Department of Biotechnology and Bioinformatics changed the nomenclature of the course on research methodology and IPR Biosafety and Bioethics along with minor changes in the syllabi of the two courses.

The Department of Computer Science and Engineering and Information Technology has modified the detailed syllabi of existing courses of B.Tech (CSE/IT), M.Tech (CSE) and M.Tech (CSE) (IS)

The Department of Electronics and Communication Engineering has introduced new elective course of Computational Electro Magnetics for the batch of Ph.D. students admitted in 2019-20. The department of Electronics and Communication Engineering has modified the existing lab and Theory courses. The Biotechnology and Bioinformatics has modified the Course structure and course description of the program M.Tech (Biotechnology).

The new course structure of open electives for B.Tech (Computer Science & Engineering) and B.Tech (Information Technology) has been adopted in 2020.

The revised course contents of the course similar to the Research and Publication Ethics (RPE) as mandated by UGC for all Ph.D. students with inclusion of practical session/assignment has been introduced. Introduction of MOOC's for 4/3 credits core courses in the curriculum where the syllabi offered by the NPTEL matched with those in the existing curriculum. The evaluation scheme of seminars for M.Sc. program has been adopted in similarity with that for M.Tech programs.

The Department of Biotechnology and Bioinformatics introduced new Electives in elective category Elective-I (Molecular and Clinical Diagnostics, Quality Control and Quality Assurance) and Elective-II (Nano Biotechnology: Principles and Applications, Cell Signaling) for the course M.Sc Biotechnology. Some

changes in the courses have been made for the Minor Specialization in B.Tech Biotechnology replacing the existing courses, Cell Biology and Cell Culture Technology in place of Microbiology, Cell Biology Cell Culture Technology Lab in place of Microbiology Lab and Down Stream Processing in place of Food and Agriculture Biotechnology. Similarly the courses offered to Minor Specialization of B.Tech Bioinformatics have been changed replacing the Biological Computation with Bioinformatics Data Management and Biological Computation Lab with Bioinformatics Data Management Lab.

Two core subjects of B.Tech 7th semester Computer Science and Engineering and Information Technology: Software Testing and Debugging and Software Testing and Debugging Lab for the 2017 admitted batch for B.Tech., were offered as elective courses during the 5th semester and in lieu of these two courses two courses, Deep Learning and Advanced Software System Lab, were introduced for B.Tech 7th semester Computer Science and Engineering and Information Technology during odd semester 2020.

The department of Electronics and Communication Engineering has sought the approval for the changes in the course structure of M.Tech (Electronics and Communication Engineering) from the academic session 2021-22. The department has also proposed the introduction of M.Tech (Electronics and Communication Engineering) with specialization in Internet of Things in the existing program.

There have many initiatives in view of the lockdown due to COVID, to make sure that the academic activities are completed in time bound period. Some of them are

- Engaging for conduct of proctored on-line exam.
- Conducting T3 Exam of final year students in on-line mode.
- Offering the offline mode for T3 examination also to the students.

Changes in the academic calendar, i.e. odd semester 2020 and even semester 2021 have been made in view of COVID-19 pandemic. Instructions were issued for conducting the online teaching till COVID situation subsides. The academic load of the students was reduced to 50%-60% of the approved load in teaching scheme for the odd semester 2020 & even semester 2021. Measures were suggested to make the online teaching more effective by sharing notes, PPTs with the students well in advance before the schedule of the class. An additional one hour per week interactive session was provided in the time table for removing the difficulties and doubts of students of each subject.

3. **Use ICT based learning tools for effective teaching-learning process :**

All class rooms are ICT enabled and all teachers use ICT resources. Teachers use blended approach of ICT and conventional teaching to cater students of diverse background. JUIT is using webkiosk as ERP to

facilitate many components of teaching. The students actively make use of resources available on these ICT enabled modes. All lecture theatres, class rooms and tutorial rooms are well equipped with the multimedia tools and are used by the faculty to prepare and deliver lectures using the same. The lectures are also supplemented by the external links for further reference using the ICT tools. The whole campus is wifi enabled. The whole campus including the academic block, hostels, residential accommodation have access to high speed broad band connectivity (1 GBPS internet link from BSNL and 50 MBPS from Railtel on OFC). Also server room is connected from all the hostels, Departments and Residences through 144 core single Mode OFC (2000 Mts). During the current pandemic, the University is carrying out the online-teaching using the student version of Google Suit. All the class rooms have been provided with web cam and mic and digital writing pads with high resolution wide angle camera with processor also installed in some classrooms. Eyeris Multi touch USB Interactive white board unit is installed in 6 classrooms to take the classes simultaneously in the online and off line mode. Server access to students has been provided through VPN so that students can access local server remotely The MOOC open courses, Swayam's NPTEL courses, UGC-INFONET digital library consortium and NDL are offered to students and faculty. The university also encourages the students to enroll for virtual labs, CAD, CAM, language laboratory *etc.* The LRC activities are fully computerized with the help of Library Management Software 'LIBERTY'. Apart from print collection, LRC has subscription of various Engineering and Technology related online databases which offer huge collection of full-text resources in all key areas. LRC has developed a digital library using DSpace Open Source Software. This digital library works as an institutional repository to store scholarly output of the institute. The university library, i.e., Learning Resource Centre provides access to many digital libraries like ACM, ASCE, ASTM, IEEE explore, ProQuest, Springer , siam *etc.* and provides services through delnet for Inter Library Loan and document delivery services on regular basis *etc.* The approximate number of online resources includes 7,564 online journals, 17,794 online proceedings and 372 e-books. The LRC has implemented and integrated anti-theft electromagnetic system of 3M Security to keep a check on movement of LRC documents at the entry gate. It is mandatory for the Ph.D. students to submit their theses and dissertations in electronic form to Shodhganga, a repository maintained by Infflibnet.

4. Soft skill for students

Soft Skills stands for "social/abstract/life/people skills". The term indicates a high level of emotional intelligence in understanding a given situation, mood or attitude of a person that goes beyond the spoken or written language. Unlike hard skills that refer to an individual's specialized skill set and ability to perform specific tasks, Soft skills penetrates every facet of our day to day activities. It includes attributes such as effective communication skills, subtle behavioral traits, voice modulation and gestures. This

workshop will focus on a variety of Soft skills that one must learn to incorporate when communicating with people.

Great teachers and philosophers like Socrates, Aristotle, Swami Vivekanand, Sarvapalli Radhakrishnan, APJ Abdul Kalam et al. spoke about great concepts in the most simple, clear terms that were interesting and touched our higher selves. We found their expressions beautiful that etched an impression in our hearts and minds. How did they do it? Is it also possible for us to do the same? Can we succeed in speaking and expressing ourselves in the most perfect way every time we open our mouths? The workshop helps us finding answers to such questions. We need to understand, practice and deliver.

In the present day scenario, soft skills have become indispensable for the success of any organization; for personal growth and career enhancement. Some of these skills include:

- Initiative (“To get up and do” attitude without being told to do a work. To do what needs to be done and do it to one’s best ability and not just the minimum required.)
- Leadership qualities (An expression of authority that inspires others to follow and act by gaining trust and credibility)
- flexibility and adaptability (to allow and accept change, to follow the flow and not go against it, quality to facilitate accomplishment)
- Problem Solving Skills
- Critical Thinking (Making reasoned judgments that are logical and well thought out. It also arouses our curiosity to learn more and be open to new ideas. Next is healthy skepticism when you have questions as and when exposed to new concepts. Having humility is extremely important, to own up and admit your shortcomings and mistakes)
- Time Management (balancing time to accomplish goals)
- Conflict Management/Resolution
- Self-Motivation
- Team Work (In most studies, industries having good teams upholding organizations’ vision)
- Personal Accountability (Owning up to one’s actions and behavior and be responsible for them)
- Culture and Communication

The workshop will comprise of the following sessions:

1. There will be ten sessions covering the following areas:
 - Time Management
 - Managing Delay: Procrastination
 - Different Mindsets

- Being Assertive
 - Anger Management
 - Being Attractive
 - Critical Thinking
 - Leadership Skills
 - Team Work and Collaboration
 - Improving Speech Patterns and Good Listening
 - Social ethics, etiquettes and mannerisms
2. 8-10 sessions in the Language Lab with an inventory of exercises and instructions for the students to practice on their own.

After a satisfactory performance in the class and on successful completion of the lab exercises, a certificate will be awarded to the qualifying students.

The University has partnered with IIT Bombay so that students can enhance their future prospects by taking Skills and Certificates on a range of popular & lucrative Software courses through Spoken Tutorial Program (www.spoken-tutorial.org). The university agrees to include Spoken Tutorials as MOOCs for practical courses, wherever possible. University ensures that the entire department is taking the benefits of the program. The training focuses on providing Computer/Software training to the students associated with University. These training are held in the computer lab through distance learning mode. JUIT, Solan is associated with Spoken Tutorial Project; IIT Bombay for providing ICT based teaching and learning.

CERTIFICATE COURSE IN FOREIGN LANGUAGE

(FRENCH AND GERMAN)

In view of increased globalization and integration of economies, the opportunities to work abroad or with people of other nationalities are numerous. Thus, all professionals must be prepared to exploit such opportunities. In view of this the Department of Humanities and Social Sciences offers a certificate course in foreign language – French and German. Enrolment for the course was offered for B.Tech/M.Tech/Ph.D students and Staff/Faculty/Campus residents.

- Period: August to December 2019
- Total Hours for course delivery: 42 hrs
- Total number of sessions: 21, 2hours sessions @ 2 sessions per week

5. Social and industry connect:

The university regularly conducts various activities to sensitize the students and faculty about the Institutional Social responsibilities. The faculty visits secondary schools school students and

teachers to introduce the latest development in science. The other activities involve giving talks, organizing discussions with students, participation in events such as career fairs and science and technology camps. There is also representation of industry in the IQAC of the JUIT as Industry Expert.

Workshops/schools for teachers and/or students are carried out by inviting groups of school students to the JUIT campus for lab visits and workshop. Lectures for various disciplines are delivered to the students. The school teachers are invited to participate in workshops where they are able to learn effective strategies to engage students in science. Besides organizing independent events, JUIT also provides support for events that promote sciences awareness. JUIT faculty and staff regularly participate in International, National and State level science and engineering events for the same.

A webinar was recently delivered for school, college and Universities faculties on Teaching and Learning by Prof. Sudhir Kumar 17th October 2020. 75 participants of Himachal Pradesh and other states attended this webinar in online mode.

A training on working of Biogas Reactor at Air Force Station, Chandigarh was conducted on 21st September 2020, whereby anaerobic digestion of food waste was demonstrated to generate biogas that can be used for cooking or lighting. The biogas reactor was installed for the utilization of wastes for generating biogas in the 3BRD Air Force Command station Chandigarh.

National Science Day 2020 was celebrated at Govt. Degree College, Solan (H.P.) on 28th Feb 2020, Dr Hemant Sood (Associate professor, BT&BI) Department of Biotechnology and Bioinformatics, JUIT, Wagnaghat delivered lecture on Scopes of applied biology in Govt. College Solan. As per the theme of National Science Day Celebration 2020; Women in Science, Dr. Hemant motivated the students of B.Sc. (medical) final year and second year by citing contribution of women in science and technology. She provided them insight about future scopes in applied biology where usage of multidisciplinary sciences can be explored for research and future avenues.

The Disaster management and research cell (DMRC), Civil Engineering department of Jaypee University in collaboration with Himachal Pradesh District Disaster Management Authority (HPDDMA), Solan conducted a three days training program for 28 masons (from Kandaghat block), 3 Junior engineers, 2 educators from ITI Solan and officials from DC office Solan during 25-27 February 2020 in the program Training for Masons on Hazard Resistant Construction. Jaypee University has been chosen as a nodal center for various trainings and awareness programs conducted by HPDDMA Solan.

Under the project of Himachal Pradesh Council for Science, Technology & Environment (HIMCOSTE), Mr. Pramod Kumar, Project Associate, visited Matal Panchyat in Rajgarh District (H.P.) on 17th December 2019. He interacted with the villagers and made them aware about the project and its usefulness. He also demonstrated the working of the project, and explained how

heat obtained from household chulhas can be utilized to generate energy for charging a mobile phone. He demonstrated the indigenous design model to the villagers.

Dr Sudhir Kumar, Dr Hemant Sood and Mr Deepak (Department of Biotechnology and Bioinformatics) visited Army Public school, Ambala Cantt on the 20th November 2019 for interaction with science students. The activities of Centre of Excellence in Sustainable Technologies for Rural Development were explained. Dr Sudhir Kumar shared the technology and usefulness of portable biogas reactors, Pine – briquettes, Vermi composting and working of Sewage Treatment Plant. Dr Hemant talked about technologies developed for conservation and propagation of medicinal as well as exotic plant species.

Installation of Biogas Reactor at Govt. Girls Sr. Sec School Solan with the help of JUIT: Biogas Reactor Installation at (1500 litre digester and 1000 litre gas holder) at Govt. Girls Senior Secondary School, Solan, HP. (20 September 2019, sponsored by school Funds and supported by JUIT, Wagnaghat).

An activity on Technology Extension was carried out on 15 – 17 July 2019 for the Fabrication of 02 Biogas Reactors in Kanpur of 3000 capacity each at KFCL, Jaypee Plant, Kanpur. These biogas reactors were fabricated at KFCL in the presence of Dr. Sudhir Kumar, Dr. Ashish Kumar and Karam Dass. The reactors run on leftover food waste of Annapurna of KFCL.

A Workshop on Cultivation of High Value Medicinal Plant through Micropropagation Technology has been organised by JUIT and coordinated by Dr. Hemant Sood in collaboration with DST-SYST Funded Project On “Socio Economic Upliftment of High Altitude Farmers of Himachal Pradesh through Transfer of Micropropagation Technologies for High Value Medicinal Herbs” On 7th May 2018 at Archhandi, Kullu, H.P.

An Awareness and Exposure Visit of Farmers was conducted at JUIT Wagnaghat for their Socio-economic improvement on 25th and 26th December 2018.

An invited Talk by Dr. Tiratha Raj Singh, Department of BT and BI on Alzheimer's Disease on World Alzheimer's Day, on 21st September 2019 was delivered at the Loreto Convent School, Shimla, H.P. for the students of High School and higher secondary and teachers of the school with participants numbering about 350, with objectives of the student's awareness for the neurological problem Alzheimer's Disease and to make students familiar with new and emerging fields of studies such as Bioinformatics and Biotechnology and various research domains in these areas. The purpose was to introduce school students with the recent problems related to neurological disorders. It was an interactive session and students enjoyed the learning towards brain, neurons and AD. It was also told to students that older people are mostly affected by this disease and therefore, we need to take care of our grandparents for the same. It was also mentioned that care is the most important component for AD patient's management.

An exposure visit of class XI and XII students of Loreto Convent School Tara Hall was organized on 31st May 2019 to Jaypee University of Information Technology, Waknaghat. With the guidance of Sister Nirmala – Principal Tara Hall School, 110 students along with two teachers – Dr. Anu Gupta and Mrs. Priyanka Nag visited the Jaypee University Campus. The exposure visit was coordinated by Prof. Sudhir Kumar of JUIT.

Student and Faculty Visit from Pinegrove School Dhrampur, Solan comprising of a group of 27 students and 3 teachers visited Jaypee University of Information Technology on 13 September 2019. This visit was facilitated as part of outreach program of Jaypee University Waknaghat. An overview of University and its' academic programs was provided by Prof. Sudhir Kumar. The students were taken to different laboratories of Department of Biotechnology and Bioinformatics, Computer Science Engineering, Electronic and communication Engineering, and Civil Engineering. The facilities available and major research activities going on in respective labs were introduced. Besides this students also visited the biogas reactor installed in the campus and learnt about its' design and working to convert kitchen waste into biogas.

Workshop cum Exposure visit to Department of Physics and Materials Science (PMS), JUIT by Govt. Degree College, Solan, H.P. on 14th March 2019. A workshop cum Exposure visit was organized for the 140 students of B.Sc. (non-medical) final year from Govt. College Solan. Event started with an inaugural lecture by Dr. P.B. Barman on Nanotechnology while Dr. Rakesh Bajaj from Department of Mathematics talked about Statistics and its applications in real life. JUIT is organizing various such events for the school and college level students for the dissemination of scientific and technological innovations and latest updates to keep Himachal students updated and to make them competent enough in this rapidly developing scenario.

Workshop cum Exposure visit to Department of Biotechnology and Bioinformatics JUIT by Govt. Degree College, Solan, H.P. on 7th March 2019 for 104 students of B.Sc. (medical) final year from Govt. College Solan. Dr Hemant Sood (Dept. of BT&BI) coordinated the workshop by welcoming the students and providing them insight about the future aspects of Biotechnology either for post-graduate studies or for research explorations.

Awareness and Exposure Visit of Farmers for their Socio-economic Improvement To JUIT, Waknaghat. Visit of farmers organised at JUIT in collaboration with DST-SYST Funded Project on "Socio-Economic Upliftment of High Altitude Farmers of Himachal Pradesh Through Transfer of Micropropagation Technologies for High Value Medicinal Herbs" On 25th and 26th December 2018 Coordinator: Dr. Hemant Sood and five farmers of The Phati Jana Cooperative Agriculture Service Society, Village Archandi, Kullu of Himachal Pradesh visited Department of Biotechnology and Bioinformatics for Awareness and Exposure visit for improving their socioeconomic status and exploring future avenues for themselves and for their society members. They have reached JUIT on 25th December and in the evening media preparation was carried out for demonstration of plant tissue culture techniques. On 26th they were informed about basics of plant tissue culture and different ways of carrying out micropropagation of

medicinal plants. They were demonstrated with plant tissue culture techniques in Plant Tissue Culture Lab of the Department of BT &BI. Afterwards they have carried out transplantation of tissue culture plants in the glass house of the department. They were taken to High end instrumentation lab where they were informed about quantification of medicinal compounds for the quality assurance of medicinal plants. They have visited other labs and finally taken to Biogas plant near mess area, and provided the information about the digester and modes of producing Biogas with high efficiency protocols.

Training on Organic Farming and waste management was imparted to the Forty Five students of B.Sc. Of Govt. College, Solan accompanied by their teachers Sh. Rajinder Prakash and Smt. Banita Saklani at (JUIT) on 9 August 2019. The training was coordinated by the Centre of Excellence in Sustainable Technologies for Rural Development, Department of Biotechnology and Bioinformatics.

Prof. Sudhir Kumar and Prof. Ashish Kumar under HIMCOSTE project in order to promote the renewable energy resources in Himachal Pradesh, installed the biogas reactor of 1500 Litre capacity at Govt. Primary School Pooghat, Solan on the 6th March 2019 and gave an introduction regarding the Anaerobic digestion for the generation of biogas in the rural area.

The Centre of Excellence in Sustainable Technologies for Rural Development (CESTRD), Department of Biotechnology and Bioinformatics, JUIT conducted a training session on “Working of Biogas Reactor” at the Govt. Sr. Sec. School, Burmana, Bilaspur, H.P. on the 8th April 2019.

The reactor was installed in the school. The members of the CESTRD team explained the working and use of biogas reactor to students, teaching, and non-teaching staff.

One Day Workshop on ‘National Science’ Day 28th February 2019 at St. Bede’s College, Shimla on 28th February 2019, ‘National Science Day’ with the theme ‘Science for the People and the People for Science’ – a One Day Workshop was organized by St. Bede’s College, Shimla. The workshop was conducted by the resource persons from Departments’ of Biotechnology & Bioinformatics and Physics & Materials Science, JUIT, Wagnaghat. About 150 students of B.Sc. (medical and non-medical), and M.Sc. (Microbiology and Botany) streams participated in the workshop. The main objective of the workshop was to educate and motivate students for exploration of different arenas in science, so that they may pursue a research oriented career in area of their interest.

VISIT OF SAMBALPUR UNIVERSITY, ODISHA TO JUIT

The fourteen M.Sc. students from Department of Biotechnology, Sambalpur University Odisha with two faculty and one staff members visited the JUIT campus as a part of their Institute Visit Program. Dr Anil Kant, Dr. Chitranjan Rout and Prof Sudhir Kumar coordinated the visit. The visitors stayed in the university campus from 27 Feb. to 02 March 2017. The students were taken to various Labs of Biotechnology and Bioinformatics Dept., Computer Science and

Electronics and Communication Dept. and they also visited Biogas and sewage treatment plant of the University on 1st March 2018. Various research activities, experiments, and working procedures of the facilities were demonstrated.

VISIT OF GOVT. COLLEGE SANJAULI, SHIMLA TO JUIT

The students of B.Sc. final year students (23 in numbers) of the Govt. College Sanjauli, Centre of Excellence, Shimla accompanied by 4 faculty members visited JUIT on the 28th April 2018. The Department of BT&BI coordinated the visit. They were taken to the Departmental labs of Biotechnology and Bioinformatics, where interaction with scholars and faculty coordinator were carried out. They were informed about different research projects of the Department. They visited Biogas Plant and HoD, Dr Sudhir Kumar provided all detailed information about the latest interventions carried out for the same.

The JUIT outreach activities' team conducted workshops at Swami Vivekananda Govt. Degree College Ghumarwin and Govt. Post Graduate College Bilaspur of Bilaspur District in Himachal Pradesh on the 20th March 2018. The 6th semester students of B.Sc. (Chemistry, Physics and Biotechnology) at both the colleges were addressed by Dr. Tiratha Raj Singh and Dr. Ashok Kumar regarding research areas in Bioinformatics, Biotechnology and Dr. Ragini Raj Singh about Career Opportunities in Physics and Statistics, Electronics and Communication. The team members were also interacted with all faculty, lab staff and students.

Industry visit

Industrial visit Minchy's Kandaghat (19 August 2017): Minchy Food product Ltd. Sadhupul-Kandaghat on 19th August 2017 by 33 students and two faculty member of Dept. of Biotechnology and Bioinformatics Students: Industrial visit was carried out at Minchys food product ltd- Sadhupul, Kandaghat on 19th August 2017 especially for semester one student. The company is located in Sadhupul, Tehsil Kandaghat, Dist. Solan- H.P. The main objective behind the visit was to make student aware about how various activities related to food product processing, packing marketing, are carried out in company and give them feel of biotechnology applications as soon as they start there course.

A visit of 32 third semester students along with Dr. Sudhir Kumar and Dr. Udaybhanu was carried out at Central Research Institute Kasauli (H.P.)-173204 on the 07th October 2017. The purpose of the visit was to make students aware about how various activities related to microbiology, vaccine, antisera and diagnostic reagent production are carried out in Govt. research institution. This was also to provide them feel of biotechnology applications as soon as they start their course. Central Research Institute (CRI) is a premier research institution dedicated to research in the field of medical and public health, manufacture of vaccines and antisera, human resource development and to act as a national referral centre for public health problems. Recent developments in regulatory requirements and introduction of Schedule M concept in vaccine manufacturing emphasized the need of cGMP compliant infrastructure and

processes. Creation of cGMP compliant DPT production facility has made CRI as the first Central Government Institute to have cGMP compliant infrastructure for vaccine production. The areas were identified for possible collaboration of JUIT-CRI.

Academic Institution Visit to National Agri-Food Biotechnology Institute Knowledge City, Sector 81, Mohali on 6th Feb 2018 by students of B. Tech (Bioinformatics).

An academic visit was carried out to National Agri-Food Biotechnology Institute (NABI), Sector 81, Mohali on 6th Feb 2018 for second and third year bioinformatics students. Dr. Narendra Kumar and Ms Sonika Gupta along with 18 students visited the Institute. The purpose of the visit was to expose students to various research activities undertaken in the premier research institution in government sector, and to give students a chance to interact with scientists and students working on cutting-edge biotechnology research. It was also an opportunity for the students to see the latest infrastructure used in the biotechnology sector. National Agri-Food Biotechnology Institute is the very first food biotechnology institute established by Department of Biotechnology, Government of India. The institute's mandate is to carry out research in agri-food sector and improving nutritional quality through biotechnology research. It's established to become a center of excellence to provide leadership in agri-food research. The students were shown the various equipments used in biotechnology research at NABI. Students were shown gas chromatography and liquid chromatography systems and their functions were explained to them. The high performance thin layer chromatography and particle size separator were also introduced. Students were then taken for a tour to high performance tissue culture facility. They were shown and explained the purpose of clean air areas fitted with high efficiency particulate air (HEPA) filters and air showers and visited the high-performance computing (HPC) facility in the computational biology laboratory headed by Dr. Srikant Mantri. His staff showed the computer cluster and explained various softwares running on the machine for the genomics and transcriptomics analysis.

An Academic institution visit (a part of Industrial visit) visit by 43 B.Tech. Biotechnology & Bioinformatics First semester student accompanied by the faculty Dr. Abhishek Chaudhary, Dr. Ashok Nadda was carried out at Mushroom research Center, Solan-H.P on 28th September 2018 especially. The students were made aware about the various activities related to mushroom research, cultivation and storage in Govt. research institution. This was also to provide them feel of biotechnology applications as soon as they start their course. Directorate of Mushroom Research (DMR) is a premier research institution dedicated to research in the field of mushroom crop production, protection, crop improvement and crop nutrition and utilization and to act as a national research centre for mushroom. DMR has made significant contribution in the field of mushroom research and development in the country. Currently DMR is working on collection, identification, conservation and genetic characterization of mushroom germplasm, development of high yielding varieties, improvements in the production technologies of different edible mushrooms, technology developed for newer specialty mushrooms, integrated pest and disease management, post harvest technologies for various mushrooms and imparting

trainings to the trainers, entrepreneurs, growers, unemployed youths, women growers etc. The areas were identified for possible collaboration of JUIT-DMR.

Academic institution visit (a part of Industrial visit) was carried out at Central Research Institute Kasauli-H.P on the 20th November 2018 for 46 third semester students of Biotechnology & Bioinformatics accompanied by the faculty Dr. Jitendraa Vashistt and Dr. Abhishek. The purpose of the visit was to make students aware about how various activities related to microbiology, vaccine, antisera and diagnostic reagent production are carried out. This was also to get them acquainted to the biotechnology applications. The faculty member had an interaction with CRI Scientists—Dr. Sankhyan, Dr Yashwant and briefed him about the program of the department. The areas were identified for possible collaboration of JUIT-CRI.

The Students of III year Department of Biotechnology and Bioinformatics visited the CSIR-Institute of Himalayan Bio-resource Technology, Palampur on the 16th April 2019 and the Institute of Himalyan Bio-resource Technology and Himachal Pradesh Agricultural University KV Palampur on the 17th April 2019. The students interacted with various scientists in “Division of Biotechnology”, and got an exposure of cutting edge molecular biology technologies in biotechnology. A brief introductory lecture related to the mandate of the institute and medicinal product large scale production was delivered by Dr. Girish Nadda. Major labs visited: Nanobiology Lab, Nutraceuticals lab, Mass spectrometry facility, Natural product chemistry and Process Development division etc. Students visited to Himachal Pradesh Krishi Vishvavidyalaya, Palampur on 17th April 2019 and got information related to biotechnology methods in modern day agriculture for production of various valuable plants.

An academic visit (a part of Industrial visit) was carried out to National Agri-Food Biotechnology Institute (NABI), Sector 81, Mohali on 07th October 2019 for first year M.Sc.-Biotechnology students. The students were shown various research activities carried out in the institute and interacted with scientists and students working on cutting-edge biotechnology research. The students also got an opportunity to see the infrastructure used in the institute. National Agri-Food Biotechnology Institute is the very first food biotechnology institute established by Department of Biotechnology, Government of India.

Civil Engineering Consortium (CEC) a technical student organization established in 2008 under the Department of Civil Engineering, Jaypee University of Information Technology (JUIT), Wagnaghat organized its first industrial tour on 3rd Feb 2018 under the guidance of Mr. Pankaj Gandhi (Manager HR), Ambuja Cement Plant. The total number of students that went for the industrial tour were 41 along with two faculty members Mr. Abhilash Shukla and Mr. Niraj Singh Parihar.

CEC organized two day's workshop on “Design of Tall Buildings” which was conducted by Mr. Hemant from Innovian's Technologies for Civil Engineering students on 10th -11th March 2018

in which 65 students participated & certificates were also provided from the company. There were four sessions of 3hrs each (from 09:00am-12pm & 02:00pm-05:00pm). The event was coordinated by the faculty members Mr. Chandra Pal Gautam and Mr. Bibhas Paul

CEC organized a "SEMINAR CUM WORKSHOP" conducted by experts from AUTODESK on 10th Aug, 2018 in CR-14 which was attended by 90 students. In this seminar experts from Autodesk discussed about Company Profile, Various Autodesk Softwares, Importance of Civil Softwares, Civil Market Trends, their Applications in Real World, Value of the Certification. The vent was coordinated by the faculty Mr. Chandra Pal Gautam.

Civil Engineering Consortium (CEC) successfully organized an industrial visit to NTPC KOLDAM on 22nd Sept. 2018 under the guidance of Mr. Chander Shekhar (Manager HR), NTPC KOLDAM. The total number of students that went for the industrial visit were 60 along with two faculty members Aakash Gupta and Abhilash Shukla.

Civil Engineering Consortium (CEC) organized a Guest Lecture on 20th April 2019 in CR-14 from 10:00 am--12:00 noon which was attended by 60 students. In Entrepreneurship session Mr. Sunny Kumar (Managing Director, Innovation & Design Technologies) discussed about his own success story; How to turn failure into success?; How Learning Attitude helped him in his entrepreneurship journey; What all opportunities we have for internships and scope of every field?

An Industrial visit to C-DAC Mohali was organized by Prof. Samir Dev Gupta (HoD) and Dr. Shruti Jain, Electronics & Communication department of JUIT, Waknaghat on 13th April 2018 for B.Tech. 3rd year students to familiarize them with various aspects of applied electronics, technology and applications. Dr. Vikas Baghel and Dr. Harsh Sohal accompanied them.

Unnat Abhiyan: Jaypee University of Information Technology as a participating Institute for UBA 2.0 adopted five villages namely Wakana, Chawsha, Dumehar, Richhana and Bisa in Kandaghat Block of Dist. Solan, Himachal Pradesh. Our institute participated in following activities organized at various villages. Villagers have been made aware of Unnat Bharat Abhiyan and its importance in rural development. The major components of Unnat Bharat Abhiyan covered Sustainable Agriculture, Water resource management, Renewable energy, Rural Industrialization: Artisans, Industries and livelihood, Infrastructure development, Basic amenities

Approximately 40 students have visited the village Wakna, Chawsha, Dumehar, Bisa, Richana and carried out the door to door household survey on 21-30 July 2018. Household survey forms were filled up by the villagers and major problems were identified. The UBA team visited the We have visited the village at gram panchayat (Chawsha and Dumehar) on 04th August 2018. A demonstration on floater Bio gas was given to villagers. Some issues related to water portability were also discussed A demonstration on floater Bio gas was given to villagers in Chawsha village on 4th August 2018. Some issues related to water portability were also discussed. A Gram Sabha was organized on Independence Day 15 August 2018 as per the guidelines of UBA National

Coordinating Institute. This problem expressed by the village residents of disposing off the cow dung's was suggested to be rectified by installing a low cost floater bio gas plant which will digest the cow dung and produce methane gas. JUIT offered to volunteer for the same at convenient place at community level or at individual house hold level. The lack of computer and English proficiency among villagers especially among women was addressed by the University. The University donated the used computer to Mahila Mandal and provided proper training to them with the help of faculty and students. The issue of the poor quality of portable water as raised by the villagers was attended and the water samples from various water bodies of the villages were tested in University lab for the quality index. Physio-chemical analysis of drinking water collected from different villages adopted under UBA was carried out under this activity. The severe problems of soil erosion particularly in the valley side of the hill in the village during the rainy season and the pressure head of water being very high leading to the movement of water causing the soil erosion and its displacement to the farmers cultivable land problem was suggested to be taken care of by constructing check dams so that velocity of water can be reduced. There issue of the unavailability of Doctors in and around villages was raised with the local administration.

In the "SWACHTA HI SEWA " campaign, an initiative the prime minister of India Sri Narendra Modi launched in 2019, all the participating institutions under UBA (Unnat Bharat Abhiyan) drove a "Plastic Free Village " campaign in the nearby villages in order to achieve the goal of plastic waste free India. As one of the participating institution under UBA, JUIT located in Solan district of Himachal Pradesh also participated in the same. The students of JUIT visited a nearby village Richhana for the" plastic free village" drive under the "SWATCHTA HI SEWA" campaign. The students went to the village with a focus of spreading awareness of plastic threat to human health and environment. The students used various placards and poster with an aim of explaining villagers how they can manage and dispose the plastic generated waste, how they can minimize the use of plastic in their day to day life and many more things. The students went to almost every house of that village and collected all kinds of possible plastic wastes in order to dispose them safely. The students also carried out drug abuse rally under UBA performed at the adopted village Chawasa.

November 14, 2017

Kaizan

On 14th November 2017, the JYC Environment Club organized 'Kaizan', an Anti-drug rally and Nukkkad Natak on the campus. For 'Kaizan', a good number of people, students and faculty were joined the rally addressing the menace of drugs. Hon'ble Vice Chancellor, Prof. Vinod Kumar and Registrar, Maj. Gen Rakesh Bassi (Retd.) were also actively participated in the rally. The rally started from the Vivekananda Statue and proceeded towards the kiosks near the temple, which also became the site for the Nukkkad Natak presented by the members of Environment Club.

November 17, 2017

Blood Donation Camp

The JUIT in collaboration with Omega Leo Club has organized a blood donation camp on Nov.17, 2017. An expert team of Doctors from Indira Gandhi Medical College (IGMC), Shimla helped in organizing this blood donation camp at JUIT campus.



February 10, 2018

Halla Bol

The JYC Environment club organized “HALLA BOL”, a Nukkad Natak competition on a chilly morning of 10th February 2018, where the youth was given a platform to raise their voice against the malpractices, injustices, frauds and also habits which are fatal. Four Teams enthusiastically participated in the competition portraying the truth of the society and also gave suggestions as to how such atrocities could be solved. The portrayed problems which are prevalent in the current times, like the problem of women safety, the problem of increasing traffic and the likes. The teams got appreciation for putting the facts in front of the audience, which were seemingly drawn into the performances. The team of the Environment club turned out to be the eventual winners.



November 11, 2017

Birthday Celebration of King of Bhutan

Bhutanese Students Association (BSA) of JUIT came up with a programme to mark and commemorate the 60th Birth Anniversary of their Fourth King Jigme Singye Wangchuk on 11th November 2017. The programme was held in LT3. A good number of students turned up to attend the event and everyone was glad to see such amazing participation. The



programme started with the National Anthem of Bhutan and recitation of prayers for His Majesty's long life. A cake was served to all presented in the programme. In the event Bhutanese traditional group dance, songs and various solo acts were also performed. The programme was concluded with special refreshments such as Suja (Bhutanese Tea) and Khabxey (Bhutanese dish made of flour) were also served.

(May 7th, 2018)

Workshop on

Cultivation of High Value Medicinal Plant through Micropropagation Technology

On 7th May, 2018, a one day workshop was organised for farmers' skill development and for their socio-economic upliftment at Archhandi, Kullu, by Dr Hemant Sood, Associate professor in the Department of BT&BI, Jaypee University of Information Technology, Wagnaghat. Twenty one farmers from different villages had attended that workshop. In the morning session Dr Hemant Sood had informed the farmers about the cultivation and propagation of different medicinal plants at high altitude. She provided them information about different techniques for growing medicinal plants and provided demonstration of different techniques in their fields.



Mr Vijay Thakur, Department of Cooperation, HP State, Kullu has also informed the farmers about different schemes run by Department of Cooperation, HP State for providing them benefits.

DOCTOR FAUSTUS

(An English Play)

(April 28th, 2018)

The Literary Club at Jaypee University of Information Technology, Wagnaghat, Solan, organized and presented an English Play Doctor Faustus by Christopher Marlowe on 28 April 2018 as part of the Annual Day celebrations. The play was directed by Dr. Papiya Lahiri (Literary Club Faculty Head), and performed by 25 B.Tech. students (All branches) in the cast, including back stage team. The Literary Club student coordinators, Mayank Sharma and Saesha Verma coordinated the event.



Despite being written in the late fifteenth century, the play retains its relevance and stands for the eternal conflict between the right and the wrong that reverberates across time and generations. Marlowe's (Shakespeare's predecessor) Doctor Faustus is a Morality play which echoes the Renaissance spirit of "knowing the unknown, hearing the unheard and seeing the unseen." The students performed the play with a lot of enthusiasm and zeal, which was apparent in their flawless pronunciation and delivery of Old English. Their performance was applauded by the audience. The performance was graced by the presence of Hon'ble Vice Chancellor, Prof. Vinod Kumar and Registrar Major Gen. Rakesh Bassi.

CLUB ACTIVITIES

SLOGAN WRITING COMPETITION AND NUKKAD NATKA

29th October 2018

On 29th October 2018, First Event of Gender Champions Club –JUIT was organized, in which Slogan Writing Competition and Nukkad Natka was organized. It was held in the Dhyan Kaksh-JUIT at 4:30 PM.

Twelve teams participated in Slogan Writing Competition themed on gender equality, women empowerment, work place harassment, transgender issue and women education for innovation. Competition was judged by Dr. Neelkanth and Ms. Pragya Gupta.

Winners of the Competition:

Team VIII- 1st Position

- Diwakar Srivastav
- Aman Chaubey
- Sahil Sharma

Team VII- 2nd Position

- Sparsh
- Nishil
- Chivayushya

Special Mention

- Ishar deep Singh
- Aradhya Srivastava



Slogan Writing Competition was followed by a Nukkad Natak based on the theme of “Gender Biasness”. Performance of Nukkad Natak was highly appreciated by audience and judges.

Awareness and Exposure Visit

Farmers visited JUIT

25 – 26 December 2018

A Visit of farmers organised at JUIT in collaboration with DST-SYST Funded Project On “Socio-Economic Upliftment of High Altitude Farmers of Himachal Pradesh Through Transfer of Micropropagation Technologies for High Value Medicinal Herbs” On 25th and 26th December 2018.



Dramatic Club performed a Stage Play

Evam Indrajit

April 16, 2019

On 16th April 2019 , there had been a *Stage Play - Evam Indrajit* performed by *Young Thespians* Dramatics club of JUIT. Evam Indrajit is the most celebrated work of Indian dramatist and theater director Badal Sarkar. Accustomed on this event, we have our Honorable Director Dr. Samir Dev Gupta, Prof. Dr. M.J Nigam, Dr. Rahul Srivastava, Dr. Amit Srivastava and Dr. Papiya Lahiri.



Fire Fighting Mock-Drill

March 30, 2019

A Mock Fire Drill was organized by Laboratory Safety Committee (Dr. Sudhir Syal, Dr. Rahul Shrivastava and Dr. Gopal Singh Bisht) of the Department of Biotechnology and Bioinformatics on Saturday 30 March 2019. Shri Jai Singh ji along with his team conducted the drill. Shri Jai Singh apprised the participants of the potential hazards related to fire safety, safety precautions, and types of fire incidence that one should be aware of, for efficient fire management. Participants were acquainted with basic fire safety training including use of firefighting equipments, way to assembly area, emergency contact numbers, fire emergency plan and the emergency escape routes.



Gender Champion Club Celebrated
International Women's Day
March 8, 2019

On 08th March 2019, the Gender Champion Club of JUIT celebrated the 'International Women's Day' (under the guidelines of UGC for Gender Champions Club in Educational Institutions). Dr. Anupriya Kaur (HOD-HSS) and all the faculty members of Gender Champions Club participated in a silent march. The speech was delivered &



inspirational documentary was shown along with quiz competition among the audience.

Centre of Excellence in
Sustainable Technologies for Rural Development
**Training on Organic Farming
to Students of Govt. College, Solan**
August 09, 2019



Forty Five students of B.Sc. from Govt. College Solan along with their teachers Sh. Rajinder Prakash and Smt. Banita Saklani visited Jaypee University of Information Technology (JUIT) for training in Organic Farming and waste management. The training was coordinated by the Centre of Excellence in Sustainable Technologies for Rural Development, Department of Biotechnology and Bioinformatics conducted this training. Dr. Sudhir Kumar, Head of the Department coordinated the visit for students.

Juit Celebrated 150th Birth Anniversary of Mahatma Gandhi

'Bapu Samaran Nidhi'

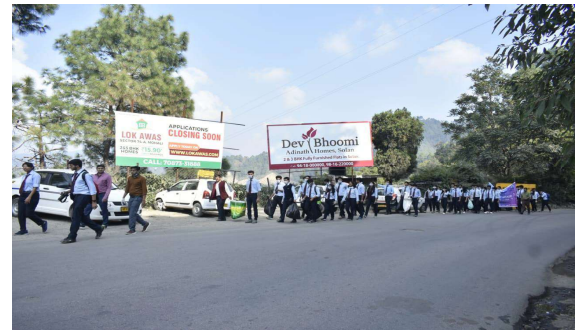
October 01 – 02, 2019

The Jaypee University of Information Technology, Wagnaghat (JUIT) celebrated the 150th Birth anniversary of Mahatma Gandhi as part of the overall concept of 'BAPU SMARAN NIDHI'. An array of events were organised to pay tributes and homage to the 'Father of the Nation'.



Swachhata Abhiyan (1st October 2019)

The Dept. of CSE & IT organised a Swachhata Abhiyan. This cleanliness drive took place on 1st October 2019. The faculty and staff members actively participated in this drive.



Tree Plantation Drive

1st October 2019

A tree plantation drive was organised at Dhyari Ghat, Solan. 150 saplings were planted as a befitting tribute on 150th Birth Anniversary of Mahatma Gandhi Ji. The chief guest for the tree plantation drive was SDM of Kandhaghat Mr. Sanjeev Dhiman who along with Solan BJP senior minister Mr. Rajesh Kashyap, ex-minister Mr. Mahendra Nath and AIREF company representative Mr. Deepak Dogra actively participated in this tree plantation drive. The slogan for the event was "Clean India Green India".



Nukkad Natak

(1st October 2019)

The event came to an end with the energetic performance by Dramatics Club through a Nukkad on Swachh Bharat in Basket Ball Court at 4:00 PM in the presence of all.



Event organised by SDM Kandaghat

Juit Participation in Swachhta Pakhwada

October 15, 2019

Jaypee University of Information Technology Actively participated in Swachhta Pakhwada organized by SDM Kandaghat at Wagnaghat on 15th October 2019 at 2PM. Group of 50 students from 1st Year to 4th Year voluntarily participated in this event. They board the University Bus at 1: 45 PM and reached Wagnaghat at 2PM. Dr. Saurav Faculty In charge of Environmental Club also accompanied them. Persons involved in this Swachhta Abhiyan were SDM Kandaghat and his team, Gram Pradhan



Waknaghat, BDO Waknaghat and Local Women, students from Jaypee university of Information Technology and Bhara University. After reaching Waknaghat students were asked to put their signature on the attendance sheet provided by the local administration and then brief introductory speech was delivered by Sub divisional Magistrate (SDM) Kandaghat regarding single use of plastic. Then students were divided into smaller groups and proceed for Swachhta Abhiyan towards National Highway (Shimla side) upto Sabzi Mandi and return back. The main focus was confined to collection of plastic dumped onto NH. After 1 hour they again gathered at Waknaghat Chowk. SDM Kandaghat gave a closing speech to students and appreciated the work done by Jaypee University students for their voluntary service towards cleanliness drive. All Jaypee university Students and Staff Returned to University by 4: PM.

Awareness camp on

Gender Issues in Contemporary Times

November 14, 2019

Jaypee University of Information Technology, Waknaghat: On 14 November 2019, Jaypee University of Information Technology organized a legal awareness camp on the theme of "Gender issues in the contemporary times". This camp included two major events- talk given by the renowned Advocate - Ms. Sheetal Vyas and a panel discussion on the theme.

Gender Champion Club- JUIT

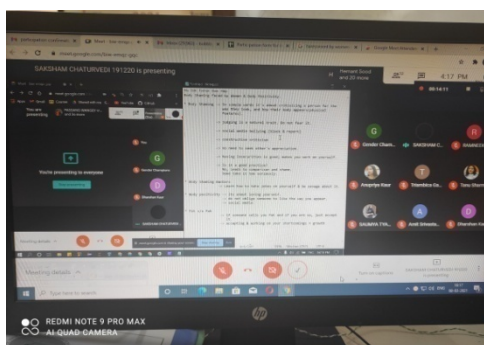
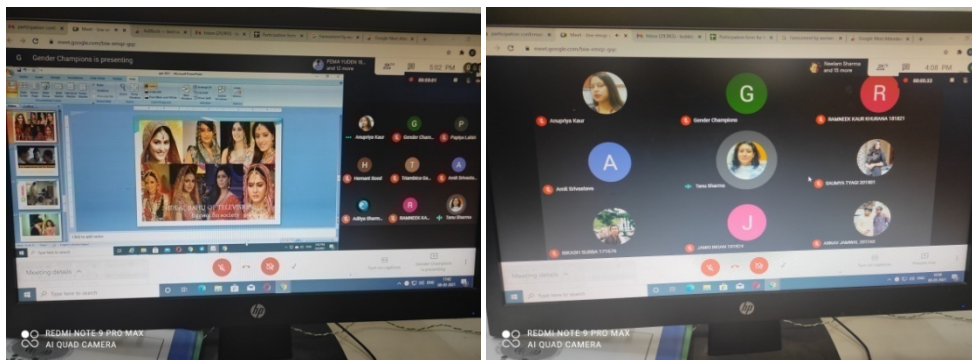
Event Report

International Women's Day

On 08th March 2021, the Gender Champion Club - JUIT celebrated International Women's Day (under the guidelines of UGC for Gender Champions Club in Educational Institutions). Under the guidance of Dr. Anupriya Kaur (HOD-HSS) nodal Officer a virtual event was organized for creating awareness for women's issues, as well as specifically calling out gender bias, and to seek out and celebrate this day. The topic of the event was "Issues faced by Women's-through cinema. Three students presented their views and one of the students recited a poem. Related videos were shown by the club members and were discussed with the participants and faculty members. Event ended with the vote of thanks.

Highlights of the event:-





Report on

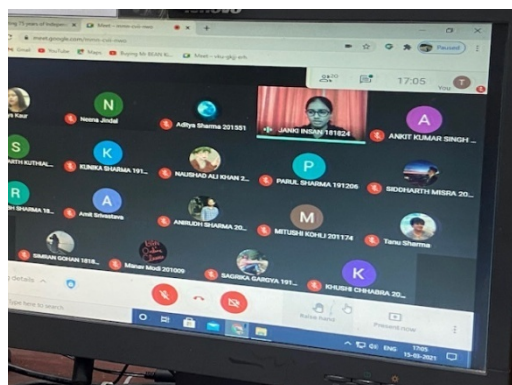
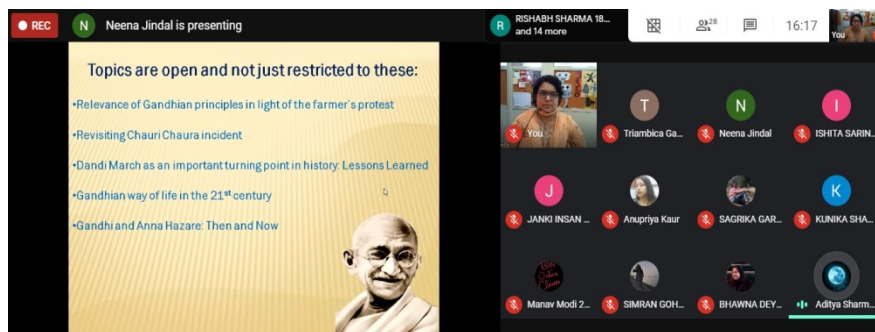
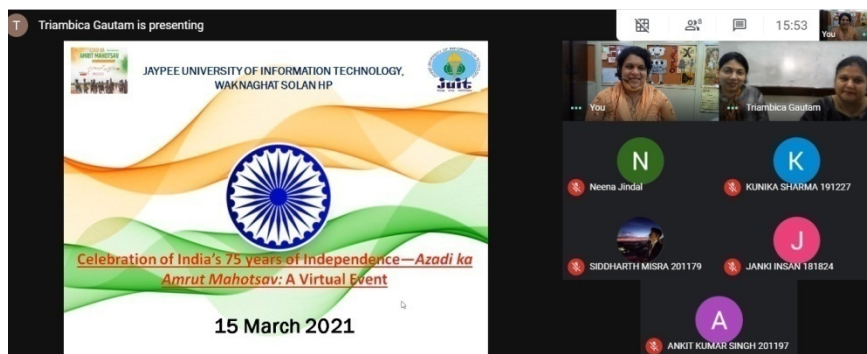
Celebration of India's 75 years of Independence—*Azadi ka Amrut Mahotsav: A Virtual Event*

Department of HSS, JUIT, Solan organized a webinar on the 75 years of independence of The Dandi March on 15 March 2021 at 4pm. Students from all years and branches of the B.Tech program actively participated and put forth their opinions and observations, making apt comparisons and taking real life examples. The following topics were open for discussion:

1. Relevance of Gandhian principles in light of the farmer's protest
2. Revisiting Chauri Chaura incident
3. Dandi March as an important turning point in history: Lessons Learnt
4. Gandhian way of life in the 21st century
5. Gandhi and Anna Hazare: Then and Now

Ms. Triambica Gautam and Dr. Papiya Lahiri organized the event. All the faculty members of HSS department and some faculty members from other departments alongwith many students were in the audience. Dr. Papiya introduced the event with a few thought provoking ideas. Dr. Anupriya Kaur as the HOD offered her opening remarks on the significance of Gandhian way of life and the event ended successfully with Ms. Triambica giving a well rounded conclusion. The student participants very creatively put forth their views, choosing poetic, declamatory, power presentation and interactive styles of presentation.

A few snapshots of the event:



The student participants:

S. No.	Email address	Name	Enrollment No.	Participated in	Topic chosen
1	201551@juitsolan.in	Aditya Sharma	201551	Poetry Recitation	Patriotic poetry
3	191002@juitsolan.in	Sagrika Gargya	191002	PPT Presentations (4-5 slides maximum)	Revisiting Chauri Chaura incident
4	201197@juitsolan.in	Ankit Kumar Singh	201197	Poetry Recitation	Revisiting Chauri Chaura incident
Open discussion on the Chauri Chaura Incident					

5	201144@juitsolan.in	Siddharth Kuthiala	201144	Open Mic	Gandhian way of life in the 21st century
6	201179@juitsolan.in	Siddharth Misra	201179	Open Mic	Gandhian way of life in the 21st century
7	201020@juitsolan.in	Anirudh Sharma	201020	Speech	Gandhian way of life in the 21st century
8	201269@juitsolan.in	Khushi Chhabra	201269	Open Mic	Relevance of Gandhi in modern India
9	191227@juitsolan.in	Kunika Sharma	191227	Public speaking	Gandhian way of life in the 21st century
10	191206@juitsolan.in	Parul Sharma	191206	Open Mic	Gandhian way of life in the 21st century
11	181824@juitsolan.in	Janki Insan	181824	Open Mic	4. Gandhian way of life in the 21st century
Open Discussion					

Meet Link: meet.google.com/mmn-cvii-nwo

6. Examination Reforms:

The university has taken significant examination reforms for the B.Tech., M.Tech. and Ph.D. programmes. The University has introduced CBCS. The University has provided option of MOOC courses upto 10 % of total credits in a semester. The examination dates of for all three tests in a semester are announced before the start of session and are displayed in the University Academic Calendar. The date sheets of the examinations are displayed at least two weeks before the respective examination and displayed on webpage and notice boards. The answer sheets are shown to the students before declaring the result as per the schedule provided in the academic calendar without any deviation. The students are shown the answer sheet after the evaluation so that they come to know about their performance. The students are provided with the model set of solution to the Question paper. They are made aware of the marking scheme. Even the teacher assessment criteria are shared with the students and are informed to the students with full transparency. There is no reevaluation or rechecking of the answer sheets as the marks are submitted to the university only after the students cross checks their marks. The questions in the paper are based on the course objectives and the performance of the students in the same are mapped against the programme objectives to analyse the performance of the students specific to course outcomes and objectives. This helps to put stress and improve on the objectives where students have poor or fair performance. The questions in the papers are categorized as easy, moderate and difficult to critically evaluate the performance of the students. The progress of the project work in case of undergraduate and postgraduate students is continuously monitored by the faculty incharge and the departments with the help of periodic seminars. The progress of Ph.D. scholars is tracked every semester from the seminars presented by them at the end of every semester and is examined by the members of the departmental PhD monitoring committee (DPMC). Based on the observations made by the DPMC members, the renewal of registration of the Ph.D. scholars is recommended. The Ph.D. students are required to complete the mandatory course work and comprehensive examination for their degree. The submission of project dissertations and thesis are subjected to plagiarism check before submission to the university, a repository of which is maintained by the LRC. The parents

are provided with the login Id of the webkiosk (ERP) of their respective wards to monitor the academic development including the attendance, marks in examination and credits earned etc. so that they are aware of the student progress. In the situation of current COVID-19 pandemic, the university is taking online examination based on the proctored artificial intelligence based examination with the following salient features.

- i. Proctor is invisible to the students
- ii. Question paper setting is the exclusive right of the paper setter and even the controller of examinations cannot modify it
- iii. The proctoring is artificial intelligence based.
- iv. The examination is single window examination system to be undertaken on laptops or desktops whereby if the students open any window other than the test window will lead to termination of test.
- v. The report generated for the test is accompanied with videography of the student for the whole duration while taking the examination.
- vi. The students are allowed to take examination using the login ID officially provided by the controller of examinations for the examination hours.

7. Tracking of the student progress after completion of course

JUIT values good student-teacher relationships. JUIT strives to keep track of their alumni who have graduated from the University in order to strengthen this connection. For the same, JUIT has a JUIT Alumni Cell (JAC) that links them via various platforms such as Facebook, Almaconnect, LinkedIn, Instagram. Recently JAC is going to launch its own website in order to improve communication with their alumni. JAC periodically asks its alumni to update their current status and keeps track of this information in a database. JAC also aids its graduates by offering a forum for the launch of their products (in the case of entrepreneurs), books, and other publications (authors or editors)

The alumni members are also part of IQAC and provide valuable suggestions from time to time. Department of Electronics and Communication Engineering have conducted a series of webinars by the alumni in odd semester 2020 so that they share their experience and guide the students. Department of BT & BI has also conducted similar webinars where their alumni shared their experience and provided guidance regarding Career Guidance, Preparations and Scopes for Higher Education in India and Overseas, Methodologies and Modalities for Higher Education at Overseas, Industry and research experience, Modes and Modalities of Higher Education in India and for IITs etc.

8. Induction training for all new teachers, and annual refresher training for all teachers:

The University conducts induction programme for the newly inducted faculty whereby they are introduced and briefed on various aspects of the University. JUIT Academic Regulations and Ordinances and other academic matters by Dean Academics, on examination system and its associated activities by CoE, on Time Table nuances and add/drop subjects by coordinator time table committee, on hostels and issues of hostellers involving faculty/staff by Chief Warden, on pay, allowances, EPF, income tax, imprest, project grants etc. by Chief Finance Officer, on LRC

and its services by Deputy Librarian, on status of JUIT, Regulatory body visits, involvement of faculty in Committees and Accommodation Policy by Registrar followed by talk by the Vice Chancellor. One such Induction Orientation Program For faculty/staff who joined the University since 15 June 2019 was conducted on 07-08 October 2020. The programme involved 14 members from the faculty/staff.

The departments of the JUIT have conducted faculty development programmes where the faculty participates in good numbers and enhance their knowledge and expertise. Department of ECE has organized many faculty development programmes like: Recent Advances in Computational Intelligence for Signal Processing (RACISP-2020), 10th - 15th August, 2020, Workshop on Emerging areas of research in Image Processing (ERIP)-2020, 06th – 12th Jan, 2020, Short Term Course on “Recent Advances in Signal & Image Processing”, 24th June to 28th June 2019, FDP on Recent Trends on Machine Learning for Signal Processing (RTMLS): May 20 – 25, 2019, 10 days FDP on Emerging Trends in VLSI and Communication(ETVC) : June 09th – 18th 2018. Similarly the department of CSE & IT has organized various courses Faculty Development Programme on "Transforming Education with Industry 4.0" from 15th June - 20th June 2020.

One week Staff Training Program on “Introduction to Computer” using ICT content provided by Spoken Tutorial project from IIT Bombay: 11th Feb. 2019 to 15th Feb. 2019, Short Term Course on (STC) on "Artificial Neural Network and Fuzzy Logic through ICT" from 23.07.2018 to 27.07.2018

Department of Civil Engineering, JUIT organized a five day workshop on Auto CAD SOFTWARE from 17th December 2018 to 21st December 2018 in which 21 JE’s and AE’s of HPPWD from various districts of Himachal Pradesh has participated. They were provided with the knowledge of Auto Cad 2D and 3D Basics and Advance, Isometric views, Advance Features of Auto CAD etc. Programme was coordinated by faculty Mr. Chandra Pal Gautam and student coordinator Gourav Mahajan.

9. Leadership/management training for all educational administrators:

The Department of Humanities and Social Science has conducted consecutive 6th, 7th and 8th workshops on Tools and Techniques for data analysis on June 19- 24, 2017; June 11 – 17, 2018; June 10 – 16, 2019, respectively for faculty and professionals.

Prof. Sudhir Kumar has been a resource person for UGC-Refresher Course on Environment Conservation and he delivered a webinar on “Biogas Technology and Environmental Conservation” coordinated by UGC – Human Resource Development Centre of Guru Nanak Dev University, Amritsar (24 November, 2020). He was also a resource person for UGC-Faculty Induction Program for Faculty members and delivered a webinar on “Ways of Teaching and Learning” to newly inducted faculty in various Govt. Colleges/Universities of India. This was arranged by UGC – Human Resource Development Centre of Guru Nanak Dev University, Amritsar (11 December, 2020)

10. Promoting quality research by faculty and creation of new knowledge:

The University gives a huge impetus on carrying out quality research and creating new knowledge. The publication indices database is a testimony of the same. The faculty and students of the University have published more than two thousand four hundred scopus indexed publications with a h-index of 51. The University has been granted with 11 patents and 13 patents have been published and one patent application has been filed. The faculty of the University has executed 77 projects sponsored from DBT, DSR, ICMR, CSIR, DRDO, ISRO, HIMCOSTE, MoEFCC etc. worth Rs. 2010.14 lakhs approximately and 05 sponsored projects worth Rs. 272.02 lakhs approximately are in progress. More than 226 students have completed their doctoral studies to get the Ph.D. degree in diverse topics.

The Department of Biotechnology, Ministry of Science & Technology awarded the Dept. of Biotechnology & Bioinformatics, Jaypee University of Information Technology a Programme Support on “Elucidation of Biosynthetic Pathways & Development of Gene Markers for High Value Endangered Medicinal Herbs of North-Western Himalayas” under the scheme of Centers of Excellence & Innovation in Biotechnology. The programme support involved modern genomics approaches such as transcriptomics, proteomics, metabolomics and computational network analysis. The center focused on identification of genes involved in the biosynthesis of major chemical constituents in medicinal plants of importance to India. The outcome of the center resulted in the identification of genetically superior strains of high value medicinal plants but will also provided starting material towards metabolic engineering of plants and microbial hosts.

The Department of Science and Technology DST, awarded grants worth Rs. 150 Lakhs under FIST in 2011 for infrastructure in research and development to the Dept. of Biotechnology & Bioinformatics (2012-17), Jaypee University of Information Technology.

The Dept. of Biotechnology & Bioinformatics, Jaypee University of Information technology has been awarded with grants for the DBT(GAT-B) -supported M.Sc. Biotechnology programme (2020) in JUIT

06 PhD pass-out students of the Dept. of Biotechnology & Bioinformatics have qualified for the National post-doctoral fellow (SERB, DST, Govt. of India)

Centre of Excellence in Healthcare Technologies and Informatics has been established under the Department of Biotechnology and Bioinformatics by a decision from the Academic Council in its meeting held on 2nd December 2017. This establishment resulted on account of the University concern about recent developments in the health care sectors along with its coordination with the rapidly developing informatics. The University is keen to pursue its association in various projects related to Biomedical and Health Informatics Systems, Health Information Management, Resource Management Systems, Digital Medical Engineering, Tele Medicine, collection and analysis of Biomedical data. The University seeks through this centre to improve the scientific and practical research in the field of health informatics on a global level

and to use it in building a knowledge society. It also hopes for global leadership in health information through creativity and excellence.

Centre of Excellence in Sustainable Technologies for Rural development (CESTRD) has been established at Jaypee University of Information Technology (JUIT) to focus on the development of rural personnel and to benefit the people of all age groups irrespective of gender, race and financial category in Himachal Pradesh (H.P.) The aim of the centre is to impart awareness about the recent sustainable technologies and Government aided scheme available for their convenient livelihood in H.P. The CESTRD will focus on the transfer the technologies to the rural people through their scientific taskforce and spread agricultural and environmental awareness. CESTRD is also determined to train the rural youth about use of upcoming technologies for skill development and to upgrade their acquaintance about self employment and entrepreneurship. The centre will target the rural youth, women groups and rural development committees through continuous consultancy, training and workshop sessions.

Center of Excellence - Industry 5.0

Jaypee University of Information Technology (JUIT), Wagnaghat, Solan, HP in collaboration with University of Nebraska at Omaha (USA) has established a Centre of Excellence (CoE) for Industry 5.0 in India.

The focus of the centre is to make JUIT an innovation hub in the emerging trends associated with industry 5.0. Activities of the centre will emphasize on the development of technical competencies required in the upcoming era of Industry 5.0. Industry 5.0 is used to describe the notion of people working alongside robots and smart machines. Industry 5.0 is a growing trend that culminates in the idea of creating the smart factory. In this regime automation allows the gathering and analysis of data across machines, enabling faster, flexible, and more efficient processes to produce higher-quality goods at reduced costs. Industry 5.0 technologies are already helping organizations increase productivity, shift economics, foster industrial growth, and modify the profile of the workforce, ultimately changing the competitiveness of companies and regions.

Center of Excellence LDRA

LDRA has setup Center of Excellence focusing on Enforcing Standards Driven Software Development under LDRA Academic Alliance Program at Jaypee University of Information Technology, Himachal Pradesh. For more than forty years, LDRA has developed and driven the market for software that automates code analysis and software testing for safety, mission, security, and business critical markets. Working with clients to achieve early error identification and full compliance with industry standards, LDRA traces requirements through static and dynamic analysis to unit testing and verification for a wide variety of hardware and software platforms. Boasting a worldwide presence, LDRA is headquartered in the United Kingdom with subsidiaries in the United States, India and Germany coupled with an extensive distributor network. As a part of Center of Excellence, Students at JUIT has been taught the use of LDRA

software in multiple programming labs to develop codes which are standard driven and as per the industry standards. LDRA bridges the gap of academic teaching and industry requirements in writing secure and reliable code.

Research Collaboration (National & International)

The department of ECE dept. has International collaboration under Student Exchange program with University of Florida, USA and Tampere University of Applied Sciences, Finland

Technology Incubation and Entrepreneurship Development Cell TIEDC

Entrepreneurship programs have been a challenge in Indian context due to lack of information regarding the business prospects in various technology-driven sectors. Additionally, there has been lack of awareness regarding the support systems to startup and innovative projects from different Government agencies. Therefore, there is need to create awareness among the youth, looking for opportunities to explore their full potential by setting up their own business ventures. TIEDC works to harness the talents and research strengths available in different Engineering disciplines and apply the same to socially relevant projects in the form of Startup ventures. TIEDC provides mentoring and technological guidance to the perspective Entrepreneurs. TIEDC is supported by the Department of Industries, Himachal Pradesh under Chief Minister's Startup/Innovation Projects/New Industries Scheme.

Department of ECE at JUIT, has an electronics and communication club 'Technovatorz' that strives to teach and help students acquire new skills in an era of rapidly evolving technology in the field of electronics and communication engineering. The club aims to provide potential minds of JUIT a platform to discuss innovative ideas and nurture their skills to tackle real life challenges in the world today and contribute to the technical society through various projects, patents and research publications. The club organizes various expert lectures, workshops, mentorship programs as well as competitions throughout the year to keep the students learning and providing them the necessary resources to implement their ideas. Activities of this club are published in the newsletter "E-Zest" every semester.

The faculty and students of the Department of Biotechnology and Bioinformatics have established SYNAPSE CLUB. This club is instituted to encourage the students to take part in various Biotechnology and Bioinformatics related events, hands-on-training, field and industry visits, conferences, workshops, seminars, webinars, societal programs and many more. It objectifies to provide all potential students a chance to do something apart from the regular curriculum. The club innovates to go beyond the curriculum and indulge in activities in the exciting world of combinatorial sciences for different biotechnological and bioinformatical products and processes. With an aim of nurturing the skills of students, Department of Biotechnology and Bioinformatics has created a platform for students to develop and exhibit

various skills ranging from Technical, arts and cultural to scientific activities, known as "SYNAPSE".

The university regularly organizes international conferences to provide for researchers, developers, educators working in different areas to present their research work and to exchange research ideas. In this pursuit the Department of ECE biannually organizes the International Conference on Signal Processing, Computing (ISPCC 2k19): 10-12 October 2019. The Department of CSE & IT biannually organizes the International Conference on Image Information Processing & International Conference on Parallel, Distributed and Grid Computing (PDGC-2018) 20-22 Dec, 2018 and International Conference on Image Information Processing (ICIIP -2019) November 15 - 17, 2019. In addition to this the department of CSE & IT has organized an international conference 'Futuristic Trends in Network and Communication Technologies (FTNCT-2018)' 09-10 Feb 2018.

Department of Biotechnology and Bioinformatics, JUIT has also organized an International Conference on Recent Trends in Biotechnology & Bioinformatics 2019 (ICBAB'19) August 01-03, 2019 at the Department of Biotechnology and Bioinformatics Jaypee University of Information technology (JUIT) Wagnaghat, Solan, H.P

Continuous Education Program 2020, an online five day Continuous Education Program on 'Current Aspects and Research Opportunities in Civil Engineering' was organized by the department of Civil Engineering Jaypee University of Information Technology (JUIT), Wagnaghat from 20th to 24th July 2020.

One Week Online Workshop on "Sustainable Construction Practices for Civil Engineers" 03rd - 08th August 2020 A one week online workshop on "Sustainable Construction Practices for Civil Engineers" was organized by the department of Civil Engineering of Jaypee University of Information Technology (JUIT), Wagnaghat from 03rd -08th August 2020.

Workshop on Waste Management – Issues and Concerns 2020, An online two day Workshop on 'Waste Management – Issues and Concerns' was organized by the department of Civil Engineering Jaypee University of Information Technology (JUIT), Wagnaghat from 20th to 21st August 2020.

The faculty has various national and international research collaborations like All India Institute of Medical Sciences, New Delhi, Panjab University and PGIMER, Chandigarh, DIHAR, Leh; DRDE, Gwalior (DRDO), IIT, Delhi; IIT Bombay, Indian Agricultural Research Institute, New Delhi, University of Frankfurt, Germany, Victoria University, Melbourne, Australia, Louisiana Tech University, USA, University of California, Berkeley, USA, Deptt. of Bioengineering, Stanford University, USA, Joint BioEnergy Institute, Emeryville, California, USA, Emory University, Georgia, USA, South Dakota School of Mines and Technology, SD, USA, University of Nebraska, Omaha, NE, USA, Pushchino Institute, Moscow, Russia, CPRI, Shimla, HP, Guru Nanak Dev University, Amritsar, Panjab etc.

Dr. Hemant Sood, visited the Stevia Biotech Pvt. Ltd. Baddi HP on 12-04-2018 and paid visit to the Stevia Farm with different varieties of Stevia along with the processing unit. She provided the consultancy to the Biotech. Firm for the years 2018 and 2019 and provided the expertise for developing and providing disease resistant, high yield and content rich stevia plants to farmers at the lowest possible cost to the farmers of Himachal Pradesh and rest of India. A consultancy honorarium worth an amount of Rs. Ten Thousand was provided for the same.

11. Mentoring of non-accredited institutions, so that every institution can get accreditation by 2022:

DBT Skill Vigyan Project The Department of Biotechnology, GOI is supporting skill development programme in Biotechnology. The objective of skill development programme is to provide is to provide high quality hands on training of tools and techniques to graduate students in area of Biotechnology (Quality Control Biologist) to make the young biotechnologist ready to take-up jobs in industries, hospitals, R&D laboratories. HIMCOSTE is nodal agency to implement this project in Himachal Pradesh

The **IPR Cell of JUIT** is TIFAC, DST sponsored working in collaboration with HP Patent Information Centre offers IPR education; ensure identification, protection, and commercialization of innovations arising out of research work carried out in the University. The cell also activity involves in identifying GIs and imparting awareness to all stakeholders. The IPR cell in association with HIMCOSTE has conducted many workshops to increase the awareness regarding IPR. Recently the IPR cell organized a workshop (08-13 march, 2021) on Women Innovation and IPR with eminent speakers Dr. Sanjiv Majumdar, Manager Manager in Start Up Activities & Intellectual Property Division, National Research Development Corporation, Delhi, Mr. Awab Habib Fasih, Student Alliance LLP, Ministry of Commerce and Industry, Government of India, West Mumbai, Ms. Raj Latha Kotni, Lexport, Advocates & Legal Consultants, Dr. Nimi Naredo, Executive Officer, IPR cell, IIT Roorkee, and Dr. Ranjana Pathania, Associate Professor, Department of Biotechnology & MHRD-IPR Chair Member, IIT Roorkee. The event had participants from various institutes viz. Thapar Institute of Engineering and Technology, A. P. J. Abdul kalam technological university, Rajeev Academy for Technology and Management Mathura Uttar Pradesh, Academy of Scientific and Innovative Research, Ghaziabad, Lovely professional University Jalandhar, Audisankara college, Chandigarh Engineering College Landran, SASTRA, Nagpur University, Maharishi Markandeswar University, Rajeev Academy for Technology and Management, Dr AKTU Lucknow etc. The IPR cell has conducted a Webinar on Patents, Innovation & Start Up's: 17 Oct, 2020 involving participation from the surrounding institutes. A Guest Lecture On "Patents on Computers and Electronics" was organized on 22nd February 2019. One day IPR workshop on Patent Filing and geographical Indications of Himachal Pradesh was organised on 30th November 2018. A Guest Lecture by Dr. Mohar Singh of ICAR-NBPGR, Shimla was organized on 16th March 2018.