

Institutional Development Plan 2023-2026



Jaypee University of Information Technology, Waknaghat

(Established by H.P. State Legislature vide Act No. 14 of 2002)

10th August 2023

(Established by H.P. State Legislature vide Act No. 14 of 2002)

CONTENTS

Sl. No.	Particulars	Page No
1	Vision	1
2	Mission	1
3	Introduction and Background	2
3.1	Learner Centric Education Process	2
3.2	International Linkages (MoU's)	3
3.3	Genesis and Accreditations	3
3.4	The Campus	4
3.5	Salient Highlights of JUIT	5
4	Strategic Plan 2023-2026 with plan 2027-2030	
4.1	Task Force 1 for Producing Competitive Professionals	7
4.2	Task Force 2 for Developing Integrated Education System	12
4.3	Task Force 3 for Developing Value Added Education System	18
4.4	Task Force 4 for Inclusions of Advance Teaching and Learning Practices	20
4.5	Task Force 5 for Quality Assurances and Certifications	24
5	Proposed Civil and MEP Works	25

(Established by H.P. State Legislature vide Act No. 14 of 2002)

Institutional Development Plan 2023-2026

1. Vision

To become a centre of excellence in the field of IT and related emerging areas in education, training and research comparable to the best in the world for producing professionals who shall be leaders in innovation, entrepreneurship, creativity and management.

2. Mission

- To develop as a benchmark University in emerging technologies.
- To provide state of the art teaching-learning process and a stimulating R&D environment.
- To harness human capital for sustainable competitive edge and social relevance.



Prof. (Dr.) Rajendra Kumar Sharma

Vice Chancellor,
Jaypee University of Information Technology

Grooming Students to Become Skilled Engineers & Ethical Citizens of the Country

(Established by H.P. State Legislature vide Act No. 14 of 2002)

Institutional Development Plan 2023-2026

3. Introduction and Background

Stressing on the importance of diversity on innovation, NEP 2020 highlighted that the same set of norms may not apply to all HEIs. Individual Institutions shall develop their Institutional Development Plan (IDP) which will act as a guideline to develop initiatives, assess progress, and reach the goals set therein, while considering the constraints, limitations and strengths of the institute.

Strengthening the student support system in Higher Education Institutions is a continuous process. This IDP will enable JUIT to face challenges in progressing towards multidisciplinary HEI from the current status of a predominantly technical/engineering University as per NEP 2020. This plan will address the upgradation of infrastructure facilities, augmentation/upgradation of students support systems like sport facilities to bring the JUIT at par with best institutions in India and abroad. JUIT already attracts the best talent among the private HEIs in the region and this IDP will definitely guide JUIT to set the standards higher.

The whole purpose of IDP and the conceptualization of various task forces, is to look into the holistic development of JUIT leading to its transformation to a multidisciplinary HEI.

3.1 Learner Centric Education Process

Jaypee University of Information Technology (JUIT) Waknaghat offers a challenging academic environment to its students. It aims to instill the habit of life-long learning and therefore, provides a learner-centric rather than a teacher-centric educational process. The system has been designed to provide students the freedom to learn what they want to learn at a pace determined by them. Post-graduate students are encouraged to develop independence in thought and action as well as the ability to develop solutions that fit the problem requirements. These students are trained to acquire the capability to deploy appropriate technology paradigms for given tasks, explore new technology, and lead teams to solve complex problems.

(Established by H.P. State Legislature vide Act No. 14 of 2002)

Institutional Development Plan 2023-2026

3.2 International Linkages (MOU'S)

The JUIT endeavours worldwide collaborations with universities, research laboratories and industries with a view to making the best academic expertise. The JUIT has tie ups with following universities/institutes.: -

- Professor Entian's Group at the Institute of Microbiology, Johann Wolfgang Goethe, University of Frankfurt, Germany
- G.K. Skryabin Institute of Biochemistry and physiology of microorganisms of Russian Academy of Sciences, Russia
- University of Nebraska, USA
- South Dakota School of Mines and Technology, USA
- SAP AG, Germany
- National School of Applied Sciences (ENSATg), Morocco
- Pushchino State Natural Science Institute, Russia
- Southern Federal University, Russia
- The Finnish Universities of Applied Science, Finland
- Tel Aviv university, Israel
- Pokhara University, Kaski, Nepal.
- University of Missouri, USA

3.3 Genesis and Accreditations

• The JUIT was conceived by a joint vision of the Govt of Himachal Pradesh and the Founder Chairman of Jaypee Group, Shri JaiPrakash Gaur in 2000. Land was provided on lease by the State Govt and the university was established by Act No 14 of 2002 vide Extraordinary Gazette Notification of the Govt of Himachal Pradesh dated May 23, 2002. The University Grants Commission

(Established by H.P. State Legislature vide Act No. 14 of 2002)

Institutional Development Plan 2023-2026

accorded its approval under Section 2(f) of the UGC Act vide their Letter No. F 9-10/2002(CPP-1) dated 09 Dec 2002. The JUIT is also a member of the Association of Indian Universities (AIU).

- The academic activities of JUIT commenced from 2002 and is currently offering undergraduate B. Tech degree programs in Bioinformatics, Biotechnology, Civil Engineering, Computer Science & Engineering, Electronics & Communication Engineering, Electronics & Computer Engineering, Information Technology and Civil Engineering with computer applications.
- Besides B. Tech. programs, the university is presently offering B.Sc. in Mathematics and Computing, BBA, M. Tech. in Biotechnology, Biotechnology with specialization in Industrial Biotechnology and Medical Biotechnology, Civil Engineering with specialization in Structural Engineering, Construction Management and Environmental Engineering, Computer Science and Engineering, Computer Science and Engineering with specialization in Information Security and Data Science, Electronics and Communication Engineering, Electronics and Communication Engineering with specialization in Internet of Things. M Sc Programs are offered in Biotechnology, and Microbiology.
- Doctoral degree, Ph.D. is offered in Biotechnology, Bioinformatics, Civil Engineering, Computer Science and Engineering, Electronics and Communication Engineering, Humanities and Social Sciences, Mathematics, Physics and Materials Science.
- The University has been twice accredited by NAAC (2011 and 2017).

3.4 The Campus

• The University campus is spread over 25 acres of lush green picturesque slopes of Waknaghat hills in the Solan District of Himachal Pradesh. The smart campus is pollution free and enjoys lovely weather throughout the year. The maximum summer temperatures touch 32 to 35 degree centigrade for one month in a year. The world class infrastructure has been beautifully designed by

(Established by H.P. State Legislature vide Act No. 14 of 2002)

Institutional Development Plan 2023-2026

M/S Arcop Associates Pvt. Ltd. an eminent Montreal based Canadian architect firm.



• The infrastructure was built in a phased manner and as of today the JUIT has a built-up area of 74372.56 sq.m. It encompasses an Academic Block with spacious Auditorium, Lecture Theatres, Classrooms, Tutorial rooms, Laboratories, Administrative Offices, Faculty Offices and Library. The second terrace of the hill has all the hostels, Students Mess, Guestrooms, Helipad, Outdoor sports facilities and Dispensary. The lower terrace of the hill contains the Civil Engineering Dept., Faculty residences, Temple, Laundry facilities and Stores. The entire campus is wi-fi enabled.

3.5 Salient Highlights of JUIT

Jaypee University of Information Technology (JUIT), Waknaghat, District Solan, H.P., ranked 138th byAll India Ranking by NIRF(MHRD) amongst all Engineering Institutes of the country is located in the picturesque hills of Dev Bhoomi Himachal Pradesh. Established in 2002, it is the first State Private University of Himachal Pradesh and is privileged to have its Chancellor as the Governor of H.P. The university is approved by the University Grants Commission under section 2(f) of the UGC Act. It has been twice accredited by NAAC (2011 & 2017) and since inception has made significant contribution through excellence in academics and research. Some significant highlights of the university are: -

(Established by H.P. State Legislature vide Act No. 14 of 2002)

- Accredited by NAAC twice (2011 & 2017)
- Ranked amongst Top Engineering Institutes under National Institutional Ranking Framework (NIRF) by MHRD, GoI for last six consecutive years.
- Ranked 24th at National Level in all Technical Institutions and Universities by India Today for 2022.
- Ranked No. 1 by India Today under the category 'Technical University with Best Faculty Student Ratio' in 2022.
- Ranked 4th in Private Technical Universities, North Zone by The WEEK, 2022.
- Ranked 7th in Private Technical Universities, all India by national magazine "The WEEK, 2022."
- Ranked 14th in all Technical Universities including IITs, NITs and government institutions, North Zone by The WEEK, 2022.
- Excellent placement record in all programs.
- 8th Semester Studies at University of Florida, USA, TAMK Finland, South Dakota School of Mines & Technology, USA & University of Nebraska at Omaha, USA for selected UG students.
- NCC Senior Wing for Boys and Girls. 84 percent faculty with Ph.D. from IITs / Universities of repute in India & Abroad.
- Categorized as 'Band B' institution (rank between 26-50) in category of 'University & Deemed to be University (Private Self-Financed)' in Atal Ranking of Institutions on Innovation Achievement (ARIIA) 2020.
- Green and Smart Campus infrastructure architecturally designed by M/s Arcorp, Canada. On campus Compost Machine, Sewage Treatment plant (STP), Effluent Treatment Plant (ETP) are in line with GoI vision of green campus.
- Wi-Fi enabled campus with 24x7 Water and Electric Supply.
- Contributed more than 3,760 Research Publications, 121 Books and 330 Book Chapters.
- Organized 29 International Conferences, 216 invited talks, 81 national workshops with around 8,000 plus delegates from India and abroad.

(Established by H.P. State Legislature vide Act No. 14 of 2002)

Institutional Development Plan 2023-2026

- Received 92 research grants from various Government Agencies &21 Patents granted.
- 30% Tuition Fees concession to Wards of serving and retired Armed Forces and Paramilitary Forces personnel for Undergraduate programs. Additional 5 percent (35%) for Wards of War Widows. 10 percent seats reserved for such categories.
- 10% seats reserved for students who have passed 12th from State of Himachal Pradesh.
- 20% seats over and above the intake for direct admission to B. Tech. 2nd year under Lateral Entry Scheme.
- Academic Curricula is supported by NPTEL, Virtual Lab, e-Yantra Lab, Spoken Tutorial, IOT, IEEE Chapter, Computer Society of India Chapter.
- The university has a Technology Incubation and Entrepreneurship Development Cell (TIEDC) financed under the Chief Minister's start-up schemes, Govt. of Himachal Pradesh.
- Exclusive Placement Cell having excellent placement record of students with reputed multinationals like Amazon, Infosys, Cognizant, Wipro etc. Highest package (off-campus) INR 50 LPA by Microsoft, highest package (on-campus) INR 32 LPA with Amazon in 2022.
- The Jaypee Youth Club (JYC) is an active student body which conducts a host of co-curricular, sports, cultural and technical activities for the students.
- University has IEEE Student Branch, SIAM chapter, ACM chapter to expose students to internationally renowned technical societies.

4 Strategic Plan 2023-2026

JUIT strives to provide and maintain the environment that encourages scholarly curiosity, culture of research and innovation, leading to the inculcation of critical thinking and keen observation abilities in the students, scholars and Faculty members. We believe the above qualities will keep the spirit of discussion and debates alive and will lead the path to academic excellence. Young minds entering the HEIs are unique

(Established by H.P. State Legislature vide Act No. 14 of 2002)

Institutional Development Plan 2023-2026

with multi-disciplinary interests and are desirous of making a name for them in the intellectual world around. In order to provide students with options to explore multiple disciplines we are planning to start various new courses and programs in a phased manner in line with the guidelines of NEP 2020.

JUIT encourages its faculty members, PG/UG students to explore opportunities in multi-disciplinary fields. They are encouraged to do research projects, organize FDPs, workshops and organize/attend International/National conferences and symposia. Opportunities are also made available to them through various MoUs with other institutions of repute and also the industry further to explore possibilities of merging of interests. Efforts are being made to increase Faculty student interaction beyond the class room encouraging the young minds to come up with their questions with a free and open mind for discussions etc. JUIT shall be striving to achieve the total strength of a minimum of 3000 students while making the most of it in terms of starting multiple disciplines by 2030.

The JUIT established designated Task Forces for planning and implementation of the strategic plan with their respective agendas:

Plan 2027 -2030

In order to pre-empt the limitations of infrastructure, which may crop up while expanding to cater to more number of departments and a larger number of students, JUIT will also work on to acquire more land and create more physical infrastructure (building space) for upcoming/proposed departments, New hostel facilities, faculty/staff residences gradually by the year 20230. JUIT will further review its plans and will quantify the progress accordingly on an annual basis to accommodate them to contemporary realities.

(Established by H.P. State Legislature vide Act No. 14 of 2002)

Institutional Development Plan 2023-2026

4.1 Task Force 1 for Producing Competitive Professionals

In compliance to NEP, JUIT is targeting to achieve student strength of 3000 by 2030. This will be achieved by introducing the new courses such as BBA (HR / Marketing / Finance / Data Analytics / Tourism), BBA in Healthcare Management / Supply Chain Management with maximum number of 30 Seats, B. Tech. in Artificial Intelligence, B.Tech. in Data Science, M.Tech. in Computational Nanotechnology etc. Also in 2024-2025, the institute will strengthen the student intake by introducing the Master's program in Sciences – M.Sc. (Maths & Computing) (30 Seats), M.Sc. (Physics) (30 Seats), M. Sc. in Computational Statistics (30 Seats), MBA by HSS (30 Seats), B.Tech. in Quantum Computing (30 Seats). This is research cum teaching university and faculty from diverse areas of research is already involved in various types of research project. Thus, research publications from every department will be published in identified journals of international repute. The students of 2nd & 3rd year degree program will be encouraged for writing the research papers.

The students from different states at national level and international students at the world level will be attracted by providing high class infrastructure, food court, gym areas, hostels equipped with modern facilities and playgrounds. The incentives to the faculty for research work, projects, and fellowship for the M. Tech. and Ph.D. students will definitely ensure the high number of admissions in JUIT. Various awards and fellowship will be given at the UG and PG level to the topper students in order to increase their motivation levels and enthusiasm. The collaboration with national and foreign institutes is one of the key points that will be considered in the next four years for more exhaustive interactions and signing of MOUs will be encouraged. The course curriculum will be revised after every 3-4 years to keep the students and faculty updated with recent findings to ensure the updated knowledge.

(Established by H.P. State Legislature vide Act No. 14 of 2002)

NEP- S. No.	Parameter	Activit y to be Compl eted By	Action Plan
		2023	Introduction of BBA (HR / Marketing / Finance / Data Analytics / Tourism), BBA in Healthcare Management / Supply Chain Management (30 Seats) Formation of the group in Department of CSE/IT on "Artificial Intelligence and Data Science": 5 Members Introducing B. Tech in Artificial Intelligence (30 Seats) in collaboration with some Company Introducing B.Tech in Data Science (30 Seats) in collaboration with some Company M.Tech. in Computational Nanotechnology (30 Seats) Setting Up of 2 new Computer Labs equipped with advanced
NEP Point 1	More than 3000 or more Students in a University by 2030	2024	Increasing strength of B.Tech. in Artificial Intelligence (60 Seats) Increasing strength of B.Tech. in Data Science (60 Seats) Introducing Master's program in Sciences – M.Sc. (Maths& Computing) (30 Seats), Introducing MSc (Physics) (30 Seats)
		2025	Introducing MSc in Computational Statistics(30 Seats) Introducing MBA by HSS (30 Seats) Introducing B.Tech in Quantum Computing (30 Seats)
		2026	Reviewing existing programmes for increase/decrease of intake. Establishing Industry oriented Computation centres. Introducing M. Tech. In Rock Mechanics and Tunnelling Technology (20 Seats)
NEP Point 3	Classificati on – Research- intensive University or Teaching- intensive University	2023	3.0 Scopus publications per faculty per year Identification of approximately 100 SCI/Scopus Journals and conferences in each department Encouraging 2 nd & 3 rd year students for writing of research papers / patents: 40 students 20 Patents filing by JUIT Attendance at Scientific Events by Faculty Members: 150 Increase in the Scholarship Amount to M. Tech. (8000 to 12000) & Ph.D. students (12000 to 18000): Submission of Research Project Proposals as a PI/Co-PI: 50 Initiating activities for handling of LIVE projects for University and Industry

(Established by H.P. State Legislature vide Act No. 14 of 2002)

~~~

			4.0 Scopus publications per faculty per year
			Updating course curriculum for some course as per industry
			2.0 Patents filing per faculty per year
		2024	Increasing MoUs with industries for establishing Center of Exell
			Increasing subscription to National and International Journals
			Increasing amount of scholarships to senior research scholars.
			Submission of at least 2 research project proposals as a PI/Co-PI
			Handling of 1-LIVE project per year per faculty.
			4.0 Scopus publications per faculty per year
			Updating course curriculum for some courses as per industry requirements
			2.0 Patents filing per faculty per year
		2025	Increasing MoUs with industries for establishing Centers of Excellence
			Increasing subscription to National and International Journals
			Increasing amount of scholarships to senior research scholars.
			5.0 Scopus publications per faculty per year
			3.0 Patents filing per faculty per year
		2026	Increasing subscription to National and International Journals
			Increasing MoUs with industries for establishing Centers of Excellence
			Handling of 2-LIVE project per year per faculty
			Building of New Branded Food courts to accommodate increased strength
		2023	Fire Fighting System Repair and Maintenance work.
			Pipe line Insulation Work in Hostels Building of Multimedia Room.
MED	Institutiona		ļ
NEP Point	1	0004	Synthetic Court on Vollyball ground.  Updating LTs, and CRs with modern digital technologies.
22	developme nt	2024	Construction of Mess Facility in each hostel.
		2025	Introducing number of Food kiosks
			Construction of Computer Center with capacity of 1000 systems.
		2026	Building of multiple Food Courts
NEP	Training	2023	To arrange trainings for Lab Staff: 10 persons

(Established by H.P. State Legislature vide Act No. 14 of 2002)

	and		PIS scheme for Faculty & Staff Members		
Point 29	Incentives		PDA for Faculty & Staff Members		
-9	for		Introducing Skill development centers.		
	Teachers/L				
	ab Staff	2024	Organizing Staff Development & Faculty Development		
	Skill		Programs		
	Developme		Developing Skill based incubation centers		
	nt	2025	Incentives for technology-related professional development to		
			instructional staff.		
		2026	Introducing skill-based certification courses.		
	All	0000	To achieve the status of UGC University under 12B		
	Universities	2023	To achieve AICTE approval as technical institute		
	including Deemed to		Improving the NIRF Ranking.		
	be University,	2024	Attaining of NBA by CSE & IT.		
NEP Point	Affiliating University		Improving the NIRF Ranking.		
5	or Affiliating	2025	Improving of NAAC grade.		
	Technical University - TO BE "University		Preparations for ABET Accreditation		
		2026	Evaluating World Ranking of JUIT		
			Evaluating BRICS Ranking of JUIT		
	Admission process more inclusive.	2023	Regular Monitoring of Admission Committees for UG & PG Admissions		
NEP			Department Level Team to Boost the Outreach activities for admission		
Point 17			To visit North East States for the admission.		
		2024	Providing more number of scholarships to the students of ECE, ECM, Civil, BI & BT.		
			Introducing a greater number of skill-oriented courses.		
		0000	Washroom modification in Hostel		
		2023	Improve the way to make them reach to Annapurna for meals		
	İ		Preparing disabled friendly timetable.		
NEP		2024	Availability of wheelchairs		
Point	disabled		Supporting students with visual impairments		
19	friendly.	2025	Installing the elevators in Academics and hostels.		
		2026	To make every class easily accessible for differently-abled students by ensuring that all buildings have ramps, railings and elevators.		

(Established by H.P. State Legislature vide Act No. 14 of 2002)

#### Institutional Development Plan 2023-2026

			Scholarship for Branch Toppers
		2023	Discussions with Alumni for initiating Scholarship(s) in the University
NEP	Financial		Introducing scholarships during the admissions.
Point	Support to	2024	Allowing students to be part of Skill development programs.
15	Students	2025	Providing financial support to differently-abled students.
			Providing scholarships to National/International level winners in Mathematics Olympiads, and Sports events.
		2026	Revising the scholarships for various types of students.
	4-year	2023	Course Curriculum Revision to - 4 Year UG Programme with Multiple entry/exit scheme (Revision of Existing Curriculum)
NEP	Degree		Preparing a separate curriculum as per NEP 2020
Point 8	program – leading to degree with "Research."	2024	To start the 7 years integrated Bachelors, Masters and Ph.D. program may be started in each department. This course is beneficial to the students who want to come out with doctorate degree after completion of Bachelors by research.
		2025	The same 7 year integrated B.Tech., M.Tech. and Ph.D. program may be started in the technical departments
	Large number of		Fee structure Approval for all the programmes for the international students
NEP Point 12	internation al students - Internation	2023	Joint Teaching: one Module of a Courses by international faculty
	alization	2024	Providing scholarships to International students
	Quality		Collaboration and MoUs with Hospitals: 2nos.
NEP Point	medical facilities for all students	2023	Insurance Policy (Group Insurance for Faculty and Staff) Visits by Private Doctors (dentist, cardiologist, Orthopedics etc.)
14	in	2024	Accidental Insurance Policies
	institutions	2025	MoU with a reputed pathology laboratory

#### 4.2 Task Force 2 for Developing Integrated Education System

The Management of the University has accorded approval for implementation of NEP-2020 at the University. Considering the provisions given in the NEP-2020, various Task Forces have been formed and assigned with the task of outlining the strategy of implementation of NEP-2020. Task Force – 2 has been assigned the task of

(Established by H.P. State Legislature vide Act No. 14 of 2002)

#### Institutional Development Plan 2023-2026

identifying strategy plans for "University – Holistic Multi-disciplinary Institution of Higher Learning" and "Integrated Education System". In order to develop the all-round capacities of the students, Intellectual, Aesthetic, Social, Physical, Emotional and Moral in an integrated manner, Task Force – 2 has identified following aspects for implementation in a phased manner: -

- Introduction of online Certificate Courses.
- Introduction of Vocational Courses in consultation with ITIs and Polytechnics as per the need of the industry.
- Introduction of BBA program.
- Programs on Yoga, Wellness and Naturopathy, EQ and Art of Living.
- Introduction of online Certificate and Diploma programs on Soft skills and Language Proficiencies.
- Introduction of Interdisciplinary PG+ PhD Programs.
- Establishment of School / Department of Liberal Arts.

Although as per existing curriculum and academic regulations, students are having sufficient opportunities for selection of multi-interdisciplinary elective courses offered by various departments. Along with the provisions of choosing departmental electives, students are having full freedom to choose courses out of the Open Elective Courses offered by various departments. The existing system provides students with the flexibility of choice-based credit system from multiple interdisciplinary elective courses.

The concept of Major and interdisciplinary minor specialization is already in place as per existing academic ordinances. Students desirous of opting interdisciplinary minor specialization have the liberty to choose their minor specialization by earning 20 additional credits. The measures to decide proficiency of their chosen field is also available for the students. Students have to identify their proficiency area and can opt of the desired proficiency. In order to implement the principle of STEM (Science, Technology, Engineering and Mathematics) integration of Humanities and Social

(Established by H.P. State Legislature vide Act No. 14 of 2002)

Institutional Development Plan 2023-2026

Sciences have been worked out and Department of Humanities and Social Science is floating Proficiency Courses from the department for B. Tech. students.

Implementation of Integrated Education System is not possible without implementation of Academic Bank of Credits (ABC). In order to provide seamless facilities of multiple entry and multiple exit and collaboration of Universities for switching from one program to other on the conclusion of 1st, 2nd, 3rd& 4th Year, University has already registered on ABC Portal and students admitted during the academic session 2021 and 2022 have been asked to register on ABC portal and get their ABC ID to facilitate accumulation/redeeming/transfer of credits as per their choice of program / specialization and Academic Institutions. The provisions of opting for online courses offered under the Ministry of Human Resource Development (MHRD) like SWAYAM, NPTEL, etc. for added credits are also available for students to choose courses as per their area of interest.

In addition to the above, University is heading towards implementation of Curriculum and Credit Framework for Undergraduate Programmes, prepared by Expert Committee and suggested by University Grants Commission (UGC) vide Public Notice No. F.No.:-1-1/2021(QIP)(CBCS) dated 12 December 2022.

NEP- S. No.	Parameter	Time Frame (Activity to be Completed By)	Activity
	University – Holistic Multi- Disciplinary institution of		Online certificate course in AI, Industrial Plant Tissue Culture with CSCs; Masonry Structures, Disaster Management
NEP Point	Higher learning.		Introduction of Vocational Courses i.e. Telecommunication, Accountancy & Finance, International Trade Management, Banking, Financial Market Management, Tourism
2		2023	To introduce BBA Program with a sanctioned intake of 60 seats to the program

(Established by H.P. State Legislature vide Act No. 14 of 2002)

~~~			Programs on Yoga, Wellness & Naturopathy,
			and EQ Introduction of Online Certificate / Diploma Programs on Softskills, Language Proficiencies
			Proposition of Interdisciplinary PG+PhDprogrammes
			To start the School of Liberal Arts and Sciences
		2024	Award of Certificate, Diploma and Degree provisions for drop out students
		2025	Introduction of Online Distance Learning Programs / Online Courses
		2026	To introduce D.Pharma, B.Pharma&M.Pharma Programs
	Integrated Education System.	2023	B. Tech. with Proficiency in Financial Management, and Marketing Management
		2024	Collaborations with Foreign Universities for Twinning Degree Programs.
			Creative combination of disciplines. Research based specializations
NEP Point 4		2026	Integration of Arts, Science, Humanities, Technology, Engineering &Mathsacross the departments.
			Research based admission provisions to Ph.D. programs and special dispensation to candidates having integrated degree.
		Already in place	Option to Opt for Major & Minor discipline.
		Already in place	Proficiencies as per chosen field / specialization.
	Imaginative and Flexible Course Structure.	2023	L-T-P-C-S (S for Self Study) structure for Courses – 4 Hrs (2 Credits) per semester
NEP Point 6			To consider 1 slot for Innovative / Novel Course / Value Added Courses in Course Structure
0			Each department shall propose at least 4 Open Elective Courses for better implementation of choice based credit system

(Established by H.P. State Legislature vide Act No. 14 of 2002)

~~~			To include one course on Education Technology for Ph. D. Students
			Development of online courses by faculty. To develop at least 4 courses by each department
		2024	Introduction of specialized UG Programs instead of general programs: Implemented in Civil Electronics  Flexibility to offer Master's Programi.e. 02 years program with 2 nd year devoted for research for those who have completed 3 years bachelor's program.  For students completed 4 year Bachelor's Programme with research - 01 year Master's Program. 5 Years UG & PG Program.  Admission to Ph.D. either a Master's Degree or 4 Year Bachelor's Degree with Research.
			Integration of Professional Courses with Vocational Courses OR introduction of Higher Degree Programs for Vocational Courses.
			Provision of Multiple Entry / Exit and transfer / redeeming of Credits
		2025	Transfer / shifting of credits across the streams.
			Provision for International student's credit Transfer.
			Admission provisions in 2nd, 3rd & 4th year through Credit transfer scheme under Academic Bank of Credits.
		2026	Specified credits for earning specific discipline degree and freedom to select courses/credits in the chosen field/specializations.
			Benchmarking with IIT Ropar for Curriculum is in process.
NEP Point 18	Curriculum – more inclusive.	2023	For BT/BI – Curriculum Benchmarking with IIT Roorkee is in process.
			Research / Teaching collaborations: 10 Articles per year with National/International Collaborators
			Faculty / students exchange: 5-10 such events every year
			Transferred credit acceptability: Collaboration with 4 International Universities

(Established by H.P. State Legislature vide Act No. 14 of 2002)

~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Inclusion of NCC as an Elective Courses and specific credits to such certification towards credit requirement for earning degree.
			Project based learning and evaluation
			Affecting the major curriculum revision every 4 years, the inclusion of industry-oriented courses: Revision with benchmarking
			Creation of facilities for access of higher education to all is including the differently abled
		2024	Deptt/Faculty will be given freedom to design own curriculum/Course and assessment / evaluation process.
			Internship based Curricula. Inclusion of 10 credits for Research Ability enhancement and 30 credits for Internships / Dissertation / Project in interdisciplinary / Multidisciplinary disciplines.
		2025	Introduction of Online Programs matching the standards of Regular Programs. Equal recognition of online programs.
			Reimaging of Vocational Education through NSQF (National Skills Qualifications Framework). Tie ups with Local Industries for vocational courses.
NEP Point 24	Technical Education- within multidisciplinary education institution	2025	Inclusion of some technical courses in disciplines other than Engineering & Technology. Credit acceptance for students who want to pursue technical education from varied disciplines. (This may be worked out for other non-technical programs).
NEP Point 20	Bridge Courses for Students	2023	Bridge courses for First Year B. Tech. students in Physics, Chemistry, Biology, and Mathematics; Bridge courses for First Year B. Tech. Students on Computer Fundamentals Counseling for students from diverse communities / regions.

(Established by H.P. State Legislature vide Act No. 14 of 2002)

Institutional Development Plan 2023-2026

# 4.3 Task Force 3 for Developing Value Added Education System

The evaluation system at JUIT is structured and transparent in design. Ordinances, rules and regulation as well as penalties for unfair means are available at university website and can be freely accessed by students. Registrar office help desks, examination cell and faculty members are forthcoming to guide students regarding their progress and any exam related issue. Slow learners are also paid attention too. They can drop some subjects for the semester at a given point of time to lessen their load and several opportunities are provided such as - semester extension in degree completion, summer semester and pursing it in the next year as a backlog subject. The provision of makeup exam is also present in each semester and schedule is provided in academic calendar. The purpose is to address concerns of students who missed their exam due to any medical or any other genuine reason. Similarly, supplementary exams are also scheduled to provide students with additional opportunity to clear the course in a proper frame of time. The academic calendar provides information on the schedule of examinations. In a semester which spreads across 20 weeks generally several points of evaluation occur such as - Test 1, Test2 and Test 3, Practical exam 1 and Practical exam 2. Besides, the component of Internal assessment for both theory and practical courses includes several evaluated sessions which are undertaken to continuously monitor student performance and provide them opportunities to improve their score and performance. A further step is the newly introduced policy for -One Project (small/large) based evaluation with every lab course, 30%-50% Lab Evaluation through project. Also, an In-house Moderation Committee for question papers is in place to foresee the quality of question papers.

NEP- S. No.	Parameter	Activity to be complet ed by	Action plan
NEP Point 7	Projects in the areas of Community engagement	2023	National Service Scheme activity  Koshish Club – Imparting Basic Education to the underprivileged children of the society.

(Established by H.P. State Legislature vide Act No. 14 of 2002)

#### Institutional Development Plan 2023-2026

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

	and service, environmen tal		Imparting Mathematics/ Science education to the children in 5 villages nearby			
education and value- based education. 2024			Donation of 10 Old Working Computer System to nearby schools/Panchayats/Health center and imparting periodic training			
			Providing ambulance facility for the nearby villagers, if approved			
		2025	Establishing a pathology lab for nearby villagers and campus residents			
		2026	Scaling up of the Biogas plant installation in the campus and nearby villages			
NEP Point 10	Move away from high- stake examination s towards	2023	T1, T2, and T3 Evaluations One Project (small/large) based evaluation with every lab course, 30%-50% Lab Evaluation through project In-house Moderation Committee for question papers			
	continuous	2024	Conducting the BoE (External Member)			
	evaluation.	2025	To increase the bandwidth of the Network from 1G to 2G			
NEP Point 13	Opportuniti es for participatio n in sports, culture/art clubs, activity	2023	Addition of Sports Coaches as per the student's interest and strength Synthetic carpeting of Volleyball, Basketball, and Outdoor Badminton Courts Organization of Inter-University Sports Competition			
	clubs, community	2024	Construction of Squash Court Organization of Inter-University Sports Competition			
	service projects, etc.	2025	Lawn Tennis Court Billiards Table			
NEP Point	Sensitizatio n on gender	2023	4-5 Activities every year on Gender Empowerment for Internal Stakeholders and community			
21	identity issues.	2024	To carry out project based on ICT tools for local women (Spanning over the villages under UBA.			
NEP Point 32	Laying Down of Standards	2023	SoPs for different activities in the system			

4.4 Task Force 4 for Inclusions of Advance Teaching & Learning Practices

Introducing the latest technology in an educational institution is important and improves the teaching and learning quality of education. Using the latest technology helps teachers to realize a number of important goals, including involving students in

(Established by H.P. State Legislature vide Act No. 14 of 2002)

Institutional Development Plan 2023-2026

an active learning environment. Also, the involvement of the latest technology in the education sector boosts the teaching and learning capability and equips the learner and educator with better skill to integrate.

In today's digital world, there is an urgent need to learn virtual platforms thoroughly because of the massive use of those platforms in our lives. It also saves our time and as well as money. For the working professional, it is not easy to take leave from the office and hence distance education/online education plays a significant role.

To promote the uses of online teaching, JUIT management emphasizes on the uses of on-line teaching platforms and tools like SWAYAM, DIKSHA, etc. as much as possible. At present, a number of a platform like Massive open online courses (MOOCs), SWAYAM etc. are available for online learning and these are free online courses available for students to enroll. Online education affects the way the learning is made easier for the students due to familiarity with the online world. Finding and learning from resources that are not available at hand but from computer-generated platforms proves to be quite helpful for a student. Furthermore, JUIT is planning to develop its own online teaching platform and also trying to develop an active MOU with online course provider like Coursera. The mandate of the university is to create digital Repositories of course content and dissemination of the same. On the same lines each department will send a proposal for content creation at MOOCS, NPTEL, etc. and Faculty members will develop their webpage and create the content of the subject. Similarly, all the faculty members from all the departments shall develop their own web pages having all the content (departmental digital library & repository for Research and development). University is also working on the framing of policy related to new courses and the development of the related online platform. To improve teaching practices JUIT is working on the development of AI based adaptive learning platform and is inclined towards project-based learning. University is very positive to initiate the open distance learning (ODL) Master's degree Programme in each Department in blended mode. At Present, the students are given exposure to online

(Established by H.P. State Legislature vide Act No. 14 of 2002)

Institutional Development Plan 2023-2026

virtual lab platforms available at IIT Delhi and IIT Roorkee etc. and this practice will be continued in the coming years as well.

NEP- S. No.	Parameter	Activity to be completed by	Action plan
NEP Point 9	Setting up incubation centres, technology development centres, centres in frontier areas of research, greater Industry academic linkage, interdisciplinary research including humanities and social sciences	2023	Innovation Labs in all 7 Departments: Each department will work on identifying the innovative/research area currently in trend and prepare the draft plan for the Lab Every department shall prepare a list of Industry expert(s)/visiting professor(s) for running a (value added) course of 0 or 1 credit (12 hrs) which may or may not be a part of curriculum. It is to be approved from BoS if included as a part of curriculum. Look for the industries which conduct 4-6 weeks FDPs for faculty. We shall plan to organize an interdisciplinary FDP in summer 2023 in collaboration with some industry like C-DAC Mohali. One such activity will be encouraged to be planned every semester. Institute-Industry Council at JUIT may be established Consultancy Projects worth Rs. 5 Lac from Industry Application for GST Number Patents in collaboration with industry: In Year 2023 CSE & BT departments will submit 2 patents. Visits of CEOs of Companies (at least 4 per yr): Incubation center/ IEEE/ACM/Technical club will promote this activity, Conduct Startup related events (R& D Expo, Murious, E Summit, Hackathon, Vichranaetc, in which founder/cofounder, Industry professionals will interact with Students.) Schedule should be decided in the start of academic year with showing details in the academic calendar. CEOs Meet (Industries) at JUIT: March-April2023. MoU: MoU has to be done with CRRI and Horiba India; Spectroscopy Lab at JUIT by Horiba

(Established by H.P. State Legislature vide Act No. 14 of 2002)

~~~~

		CII Northern Chapter: President/CEO of companies for lecture under membership with CII Northern Chapter  Mitsubishi Electric India training schedules for		
		students and faculty/staff.  B Tech. projects/ M. Tech. thesis may be assigned with one industry expert as supervisor		
		Establishing Industry Centric "Center for Statistics and Machine Learning"		
		Grants from Govt. sector: Apply for grants available for Incubation center under different schemes of Govt. of India.		
High Quality Support Centres; and Professional, Academic, and Career Counselling	2023	Academic Counseling: Counseling for Slow Learners; Regular Mentoring (Suggestions for carrier); Counseling for research and innovation Psychological Counseling: One Counselor; YourDost Career Counseling: Regular Mentoring; Mock Interviews; Lectures by CEOs/CTOs from IndustryEthical Counseling		
		Publicize the existing facilities related with counseling processes		
Latest educational technology in classrooms.	2023	Replacing old Systems from the Classrooms: 10 100 New Computing Machines for the Labs Usage of Moodle in Classrooms Attendance System using Face Recognition Improve the Wi-Fi connectivity in the class rooms Interactive Boards in Classrooms: 5		
Lead to prepare professionals in AI, 3-D Machining, Big data analysis, Machine learning, in addition to genomic studies, biotechnology nanotechnology, neuroscience with important applications to health, environment	2023	To Start Certification of 6-months and 1-year for Industry Professionals in JUIT Campus  Proposition of Proficiency in Tunnel Engineering Proposal Open Electives by the Departments: Computational Nanotechnology, Biosensors, Cyber Security, VLSI Design, Robot in Industry 4.0, AI in Design, Software Defined Systems		
genomic studies, biotechnology nanotechnology, neuroscience with important applications to health,	Idition to mic studies, technology stechnology, stroscience important lications to health, vironment			

(Established by H.P. State Legislature vide Act No. 14 of 2002)

NEP	living – to be woven into undergraduate education for enhancing employability of the youth. Use of on-line teaching Platforms and		Offering courses from NPTEL to be continued  MoU with Coursera / LinkdIn		
Point 26	tools like SWAYAM, DIKSHA, etc.	2023	To work on online distance learning activity		
NEP Point 27	Content creation, digital		Utilization of Digital Learning Centre at JIIT Noida for content creation.  Each department will send proposal for content creation at MOOCS, NPTEL etc.  All faculty members will continue digital Repositories of their course on Moodle.		
NEP Point 28	Virtual Labs (DIKSHA, SWAYAM, SWAYAM- PRABHA, etc.)	2023	Virtual lab Training workshop will be organized once in a year for faculty and lab staff.  Faculty will be encouraged to contribute to Digital Infrastructure for Knowledge sharing (DIKSHA)  Vocational training Programme for 10 and 12 class students (OLabs)  SWAYAM-PRABHA - DTH dish has to be procured (34 Channels)		
NEP Point 30	Online Assessment and Evaluation.	2023	To Continue assessment of quizzes and assignments through Moodle.  To develop AI based adaptive learning platform under COE for AI for education  To explore the feasibility of using AI based free online software for assessment		
NEP Point 31	Blended mode of learning.	2023	Project Based learning will be implemented. Minor projects in each applicable course/Labs will be given to students. Course coordinators will identify the projects.  Brainstorming session will be conducted for programming courses.  To give training to faculty members regarding teaching techniques once in a year  Industrial visit of students once in a year		

(Established by H.P. State Legislature vide Act No. 14 of 2002)

#### Institutional Development Plan 2023-2026

To conduct 2 webinar session every semester for any elective subject with selected advanced topics from expert from academia/Industry
To conduct Training session/Workshops one each semester on advance topic of research
One open elective course shall be tied up with neighboring IITs/NITs
To work on developing open distance learning (ODL) Master degree Programme in each Department in blended mode

# 4.5 Task Force 5 for Quality Assurances and Certifications

The primary objective of Task Force 5 will be to focus on the preparation for NAAC Accreditation, NBA Accreditation, NIRF Ranking and various other ranking agencies throughout the year.

# 5 Proposed Civil and MEP Works

The proposed civil, mechanical, electrical, and plumbing works related to the infrastructural development of the university have been framed and tabulated as follows:

Proposed Civil & MEP Works for FY 2022-26						
<u>S.N.</u>	<u>Description</u>	<b>Location</b>	Amount in LACS.	<u>Priority</u>	<u>Remarks</u>	
1	Water Proofing Work & Stone refixing work Complete in all respect.	SOR	25.00	Mar-22	This work can only be excuted during Feb-	
2	Water Proofing Work & Stone refixing work Complete in all respect.	Academic Block	4.00	Mar-22	May period. We may have to postpone it for Yr 2023 due to financial	
3	Expansion Joint Treatment (100 Rmt)	SOR, Acad. Block & Annapurna	3.00	Mar-22	limitations	
4	Extension of internal seating area in cafeteria.	H-9 Café	6.00	Apr-22	Should be taken up as Annapurna usage is minimal as of now	
5	Geyser storage capacity to be increased	SOR	2.16	Jul-22		
6	Extension of external seating area in cafeteria.	H-9 Café	10.00	Sep-22		
7	Organic waste compost machine (1000 kg) including civil and elecrtical works	Near FH-2 Building	22.00	Jul-22		
8	Boundary wall fencing with Old CGI sheeting as desired by Hon, FC Sir.	JUIT Campus	4.00	Jun-22		
9	Replacement of blower and pump & Installation of flow meter.	STP	5.30	Oct-22		
10	Repair of Door/window of FH-2,B,C,D & E blocks	Faculty	5.00	Oct-22		
	Auditorium stage wooden flooring polish work.	Auditorium	3.75	Oct-22		
12	Building Approval by TCP	JUIT	8.00	Oct-22		
13	Post Antitermite treatment	Academic Block	9.50	Oct-22		
14	Aluminium Glazing work and Plumbing & sanitary work in PPR	SOR	15.50	Jan-23		
15	Civil addition and alteration work	SOR	2.00	Feb-23		
16	Replacement of geysers (166 nos.)	JUIT Campus	13.50	Mar 23-26	In Phase manner	
	Fire Fighting System Repair and Maint. Work	JUIT Campus	60.00	Jul 22-26	In Phase manner	
18	Construction of Rain shelter shed on PNB gates	Bank	0.50	Nov-22		
19	Civil labs extention	Civil Engg. Dept.	0.80	Nov-22		
20	Construction of toilet block near exchange building dormitory.	Exchange Dormitory	2.50	Jan-23		
	Providing and Installation of Heat Pump in place of Calorifiers (23 Nos.)	JUIT Hostels	200.00	Mar 23-26	In Phase manner	
22	New Dryer and press machine required.	Laundry	8.00	Apr-23		
23	Hostel Signages repainting work	Hostels	1.00	May-23		
24	Pipe line Insulation Work	JUIT Hostels	7.00	Jan-23		
25	Construction of new RCC water tank (Cap.1 Lakh LTR)	Animal House Lab	12.00	Jan-23		
26	Synthetic courts( 1 Basket ball, 2 Badminton )	Sports Complex	20.00	Jan-23		
27	Addition and alteration of Cateteria in H-9	H-9	55.00	Jun-23		
28	Construction of furniture store	Faculty Block -A	2.00	Jun-23		
29	Maintenace of main water supply line	Stage -1 to JUIT Campus.	3.00	Jun-23		
30	Media Filter change	STP,Plant Room, Stage-I	2.00	Aug-23		
31	Repair and Maintenance of Shimla Guest House	Shimla Guest House	10.00	Oct-23		
	JUIT Main store sheeting changing	Main Store	1.75	Oct-23		
33	Repaing of roads and joints in Campus.	Page 1 of 2	6.00	Nov-23		
34	External Painting work as & where required	Campus	10.00	Nov-23		

<u>S.N.</u>	<u>Description</u>	<b>Location</b>	Amount in LACS.	<u>Priority</u>	<u>Remarks</u>	
35	Vehical Washing Piont	Welding	1.30	Nov-23		
		Workshop				
36	Construction of RCC water Storage Tank 3.5	Near Animal	35.00	Jan-24		
	Lacs Capacity (Under Construction)	House Lab.				
37	Constuction of workshop for Civil Engg. Dept.	Near Diesel Tank	153.90	Apr-24	Required Pre AICTE Visit	
38	Air Conditioners	JUIT Campus	5.00	Jun-24		
39	Replacement of pipeline & CP-Sanitary fittings	Faculty Residence	80.00	Jun-25		
40	Installation of Bore well by IPH	JUIT Campus	41.00	Jun-25	Any one of them	
41	Water Scheme by IPH	JUIT Campus	815.00	Jun-25	Any one of them	
42	Water tank capacity to be increased upto 60K	Stage- 2	7.20	Jan-26		
43	Construction of GYM	H-12A	16.00	Jan-26		
44	Consturction of Dormitory housing block	Telephone	95.55	May-26		
		Exchange Block				
45	Water tank capacity to be incresed upto 20K LTR.	Stage-1	0.30	Jun-26		
46	Electrical Works	JUIT Campus	175.68	Jul-22 to Jun-26	Annex. C	
47	Kitchen Equipments	Annapurna	11.50	Jul-22 to Jun-26	Annex. B	
48	Construction of Workers dormitory	Rear Side of B	55.19	Dec-26	Annex. A	
		Faculty				
49	Misc. Civil repair and maintenace work Rs.10.00	JUIT Campus	50.00	10 Lacs./ Year		
	Lacs/ Year					
50	Construction of the ramp	Near Diesel Tank	10.00	Dec-26		
	Total Amount =					

	Funds requirement for Proposed Civil & MEP Works for FY 2022-26					
CNO	Period	Amount				
3 140	renou	In lacs				
1	Upto Jul-22	40.16				
2	Aug-22 to Jun-23	325.65				
3	Jul-23 to Jun-24	353.75				
4	Jul-24 to Jun-25	1064.80				
5	Jul-25 to Jun-26	308.54				
	Total Amount =	2092.88				























