

हिमाचल प्रदेश विश्वविद्यालय-शिमला

कुलपति की कलम से...



संदेश

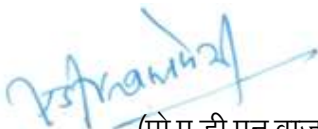
मुझे यह जानकर हर्ष हो रहा है कि हिमाचल प्रदेश विश्वविद्यालय के सूचना प्रौद्योगिकी संस्थान में शैक्षणिक सत्र 2016-17 में छंटनी परीक्षा के माध्यम से प्रवेश प्रक्रिया आरम्भ करने के लिए रूपरेखा बना ली है।

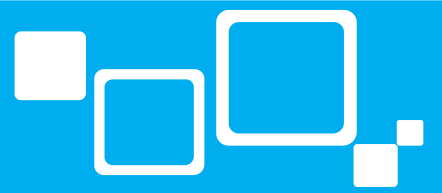
इस विश्वविद्यालय ने अपनी स्थापना के बाद शोध और विस्तार कार्य में कई कीर्तिमान स्थापित किए हैं तथा यह विश्वविद्यालय पूरे राज्य का केवल एक मात्र सम्बद्धता प्रदान करने के अतिरिक्त अकेला सह-आवासीय उच्च शिक्षा का प्रगतिशील केन्द्र है।

वर्तमान समय में सूचना प्रौद्योगिकी के माध्यम से उच्चतर शिक्षा को ओर अधिक आकर्षक बनाने के लिए प्रतिस्पर्धात्मक परीक्षाओं में बेहतर प्रदर्शन के लिए अधिक ध्यान देना चाहिए।

मुझे आशा ही नहीं बल्कि पूर्ण विश्वास है कि इस विश्वविद्यालय में उच्चतर शिक्षा ग्रहण करने के लिए उपयुक्त वातावरण के साथ-साथ यहां का मौसम भी अति अनुकूल है।

मैं यहां शिक्षा ग्रहण करने के लिए आने वाले सभी छात्र-छात्राओं को अपनी शुभकामनाएं देता हूँ।


(प्रो. ए. डी. एन. वाजपेयी)
कुलपति



संदेश

मुझे यह जानकर प्रसन्नता हो रही है कि हिमाचल प्रदेश विश्वविद्यालय के विश्वविद्यालय सूचना प्राद्योगिकी संस्थान ने अगले शैक्षणिक सत्र में छंटनी परीक्षा “प्रवेश यूआईआईटी-2016” के माध्यम से प्रवेश प्रक्रिया आरम्भ करने के लिए कार्ययोजना बना ली है।

वर्तमान समय में प्राद्योगिकी शिक्षा में पूर्वस्नातक शिक्षा ने एक विशेष स्थान ग्रहण कर लिया है तथा प्राद्योगिकी शिक्षा और कम्प्यूटर विज्ञान की जानकारी अत्यन्त आवश्यक इसलिए हो गई है कि छोटे-छोटे दैनिक कार्यों में भी इसकी उपयोगिता बहुत बढ़ गई है।

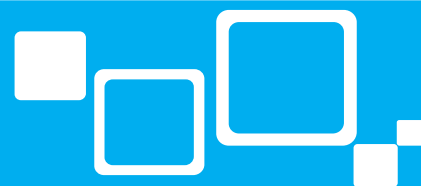
मुझे पूर्ण विश्वास है कि हिमाचल प्रदेश विश्वविद्यालय में प्राद्योगिकी शिक्षा में पूर्वस्नातक शिक्षा ग्रहण करने के लिए पर्याप्त संसाधन एवं सुविधाएं उपलब्ध हैं।

मैं इस विश्वविद्यालय में शिक्षा ग्रहण करने के लिए आने वाले सभी छात्र-छात्राओं को अपनी शुभकामनायें देता हूँ।

Rajendra Singh Chauhan

(राजेन्द्र सिंह चौहान)

प्रति-कुलपति



**FROM
THE DESK OF
DIRECTOR**



Prof. Manu Sood

India is slowly and steadily moving towards the number one spot of world's super power. One of the major contributions in this pursuit is its technical man power. The country's technical work force at present is second to none in the world and it would not be unfair to attribute this achievement of India to quality education being provided by various universities and technical institutes all across the country.

Every state in India is contributing its share of efforts in providing quality education to the students of this country and Himachal Pradesh is also one of the leading states in the northern region of India. **University Institute of Information Technology** (UIIT), H. P. University, Shimla, is one such Institute that has been catering to the fulfillment of the demand of quality engineering, for the last fifteen years. With the best placement records of yester years in the region, the Institute is at present offering **B. Tech. in Information Technology and B. Tech. in Computer Science Engineering**.

It gives me immense delight in bringing to you the **"PRAVESH UIIT-2016"**, an online application process for admission to these courses for the session 2016-17. The details for the admission have been outlined in the accompanying document.

"To build a nation, you have to build the people". We at UIIT believe in building the Engineers instead of just producing them. That is the reason why our aluminous is well placed in a wide spectrum of leading industrial houses as well as top central and state government agencies.

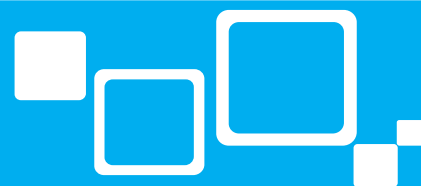
My dear young minds, I invite you people to become the part of this wonderful phenomenon of building the engineers. I assure you that, this institute not only provides the best of the theoretical technical knowledge and in hands-on exposures, but also emphasizes on special efforts for the overall development of the human personality. We truly believe in.

"Use of technology for the overall advancement of humanity with humility"

Trust me, my dear aspirants, the great experience at UIIT will not only help you in achieving your professional goals but will also provide ample opportunities to excel in various other co-curricular activities.

Looking forward to welcome you at the Institute.

**PROF. MANU SOOD
DIRECTOR**



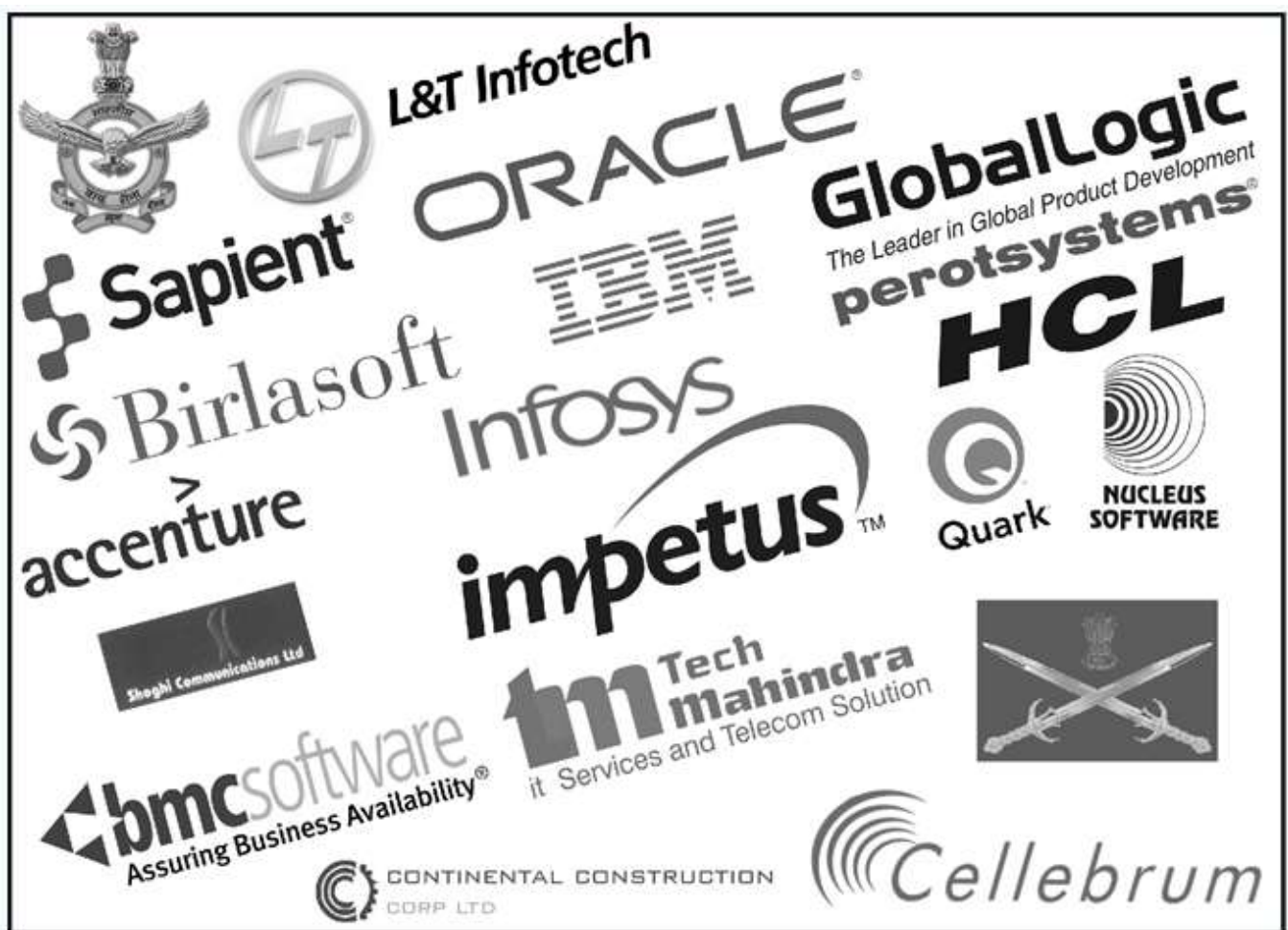
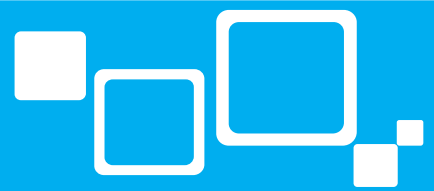
PROSPECTUS

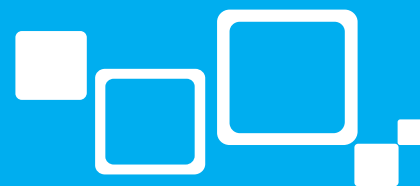
University Institute of Information Technology (UIIT)

Himachal Pradesh University

CONTENTS

UIIT : An Introduction	1
Academic Facilities	1
Attendance	3
Prizes & Scholarships	5
Placement Cell	6
Academic Programmes	6
Admission Criterion: (Fresh Entry)	6
(Lateral Entry)	7
Student Intake	7
Fee Structure	8
Entrance Examination (Fresh Entry)	9
Syllabi for Entrance Examination	10
Sample Questions	12
Faculty, Administrative and Support Staff	13
Course Outline	14
Instructions for filling the Online form	18
Submission of Application Form for: (i) Fresh Entry	20
(ii) Lateral Entry	20
Format of Application form for Lateral Entry	22
Important Dates	24





Approved by All India Council for Technical Education

AN INTRODUCTION

Himachal Pradesh University, Named after the State of Himachal Pradesh, was established on 22nd July 1970. The University is located at Summer Hill, A suburb at the western end of Shimla at a distance of 5 Kms. from the town, 5 minutes walk from the Summer Hill Railway Station, and about 15 Kms from Jubber Hatti Airport.

University Institute of Information Technology (UIIT) Shimla is a premier institution of excellence in Computer Science and Information Technology that develops professionals and leaders of high caliber imbued with values of entrepreneurship, ethics, and social responsibility. Functioning under "the Executive Council" of the Himachal Pradesh University since 2000, UIIT admits students from all over the country to the B. Tech. in Information Technology & B. Tech. in Computer Science Engineering Programmes and imparts training to make them competent, motivated Engineers, Leaders, Thinkers, Scientists and successful entrepreneurs. The process for the approval of academic programmes of UIIT by the All India Council of Technical Education (AICTE) is initiated every year as per its mandate. **The B. Tech.(IT) course has the approval of AICTE and the approval of B. Tech.(CSE) is under process at an advance stage and is expected by the month of April 2016.** UIIT Shimla has established itself as a Nodal Centre for Engineering and Technical Education being imparted through different engineering institutions affiliated to Himachal Pradesh University. It provides academic and curriculum inputs to the all engineering and technical institutions affiliated to the University.

LOCATION

The University Institute of Information Technology presently functions in Netaji Subhash Chandra Bose Building, in the main campus of H.P. University at Gyan Path, Summer Hill, Shimla. The Institute has started functioning in its own independent campus at new site. The construction work for phase I and II at new site of UIIT has been completed where classes have already been started and work for phase III is also in progress.

ACADEMIC FACILITIES

LIBRARY

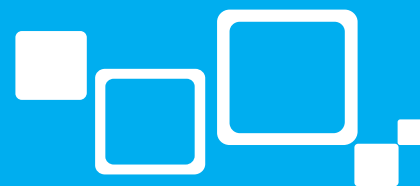
Over the past 15 years, the Institute has created a dedicated library exclusively for the usage of students and faculty of UIIT. It has acquired a good collection of books related to Information Technology, Computer Science Engineering and allied areas. An amount of more than Rs 25.00 lacs, has been spent to purchase latest editions of quality books needed by the students. Presently UIIT library has about four thousand books and a good reading space has also been provided for the students. Library also subscribes to about 20 computer magazines/Journals besides others.

Institute Library has plans to create a special section of e-books, CD-ROMs and other resource material to provide a resource bank of share-ware and other learning material. Students also have an access to the main library of the University. Library is connected with networking facility through Wi-Fi and CAT 6 cables. With future connectivity through National Knowledge Network (NKN) the benefits would be much more.

COMPUTER LABORATORY

To provide a rich hands-on experience to the students, state-of-the-art computer and other laboratory facilities have been created with an investment of more than Rs 3.5 crores. Computer Laboratory is fully networked and the facility of networking is extended from computer lab to all classrooms and other labs.

Intranet Infrastructure consists of hardware and software which is sufficient to meet the



requirements of Laboratories envisaged in the Detailed Course Curriculum.

Intranet Infrastructure consists of Hardware

- One Powerful DELL BLADE server with 4 Blades Extendable up to 16 Blades, configured as windows Server 2012 (R2) Data Center and dedicated LINUX Server respectively
- 130 - DELL i7- 4770 , 3.4 GHz, 4GB 1600 MHz DDR3 RAM Desktops with HD-WLED Digital Monitor.
- 50 - DELL i3 Desktop with LED Monitor.
- 10 - DELL i5 Desktop with LED Monitor.
- 13 - i7 DELL Vostro Laptops with 8GB RAM.
- 54 IBM Pentium IV Desktops.
- HCL Pentium IV Multimedia Desktops with 17" LCD-TFT with WiFi (30).
- P-IV ACER Laptops-10, IBM Intel Think pads-2, IBM Notebook Intel Pentium Centrino Mobile Processors.
- (13) HP Compaq 8510P/Intel Core2 Duo T7700 (2.40 GHz,800 MHz FSB, 4 MB L2 Cache, Intel 965 PM Chipset).
- One Photostat Machine.
- Four CCTV Cameras with backup of 1 TB.
- LCD Projectors 1700 and 2000 ANSI LUMENS.
- UPS: Three 10 KVA, One 3 KVA, Eight 0.65 KVA.
- Printers: Network Laser Printers, Inkjet Printer, Dot Matrix Printer, HP LaserJets (10), HP Laser Jet M1005 MFP Printers (09).
- INFLIBNETConnectivity.
- MFDs, Scanners, Overhead Projectors (OHP).
- Network switches - Layer 3 and Layer 2 connected with CAT6 cables.
- Dedicated WiFi Facility in UIIT- Linksys Access Points which provide wireless facility on 24x7 basis.

Softwares

System Software's (Operating Systems)

WINDOWS 2000 Professional, Vista & 8.1 & 10
 Microsoft Server 2000
 HAT LINUX 7.1
 SCO-UNIX 5.0.6 Enterprise with complete development kit

Other Softwares

VISUAL STUDIO 6.0 SQL Server 2000
 C++
 C
 MatLab
 MS Office XP
 Mathematica (latest release)
 Dreamweaver (Macromedia)
 Oracle 8i
 LIPI
 Adobe PAGEMAKER Adobe
 PHOTOSHOP

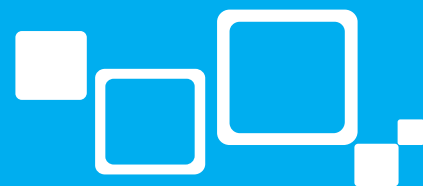
Groupware

Microsoft Back Office Server
 Lotus Domino R5 RED
 MS Exchange 2000

QUARK EXPRESS
 FLASH 5.0 with PLAYER
 FREEHAND 9.0
 FIREWORKS 4.0
 DIRECTOR 8.0 with SHOCKWAVE
 GENERATOR 2.0 Developer Edition MAPLE
 FORTRAN Animator
 Autocad 2002 3 DMAX 4.0
 NAG Libraries for Fortran
 Adobe ILLUSTRATOR

Students are encouraged to own and bring their own Laptops with Wi-Fi connectivity, which is an essential tool for the students of B. Tech. (IT & CSE) for undertaking projects, Laboratory exercises, assignments and for internet access.

INTERNET CONNECTIVITY



University has been provided Internet connectivity of **1gbps** through NKN as well as a dedicated leased line of 2 Mbps (1:1) dedicated bandwidth as part of UGC Infonet for higher education. University Institute of Information Technology is part of the Campus Wide Optical Fibre Network on which Internet facility is available on 24 x 7 basis.

WEBSITE

UIIT has two dedicated dynamic website **www.hpuiitshimla.org** and **www.uiit.ac.in** which provide useful information to the students, parents and public. Student records, schedule of curricular activities, time tables, examination schedules etc. are available in updated form. Parents and students are encouraged to use this window of information about UIIT.

LABORATORY FACILITIES

To provide a good basic understanding of the technologies, which goes into the making of technological side of IT & CSE, basic technology, well equipped and applied laboratories have been established. These labs have the latest hardware and software resource to enrich the knowledge of students. The important labs are:

Applied Physics Laboratory

Basic Electronics Laboratory

Basic Mechanical Engineering Laboratory

Basic Electrical Engineering Laboratory

Drawing Hall/lab

Digital Electronics Laboratory

Digital Communication Laboratory

Information Technology Trainer Workshop

Computer Network Laboratory

LECTURE THEATRES

To provide an inspiring and exciting learning environment, the modern lecture theatres of UIIT are equipped with latest communication and multimedia equipment such as LCD projectors, wired connectivity as well as wireless Wi-Fi connectivity.

FACILITIES ON THE CAMPUS

Campus has a good cafeteria, health centre, market, Guest House, recreational facilities and banking facilities with 24 x 7 ATM service.

FACULTY

UIIT has best faculty resources with rich academic and research credentials. Faculty consists of core faculty, guest faculty, visiting faculty and faculty from industry. Faculty members are encouraged to actively pursue research work and participate in consultation projects and teach in continuing education programmes.

IT SOCIETY (ETSA)

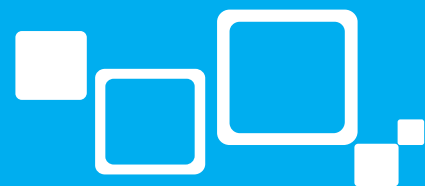
To develop leadership qualities among students, an IT Society "**Engineering Technology Students Association (ETSA)**" has been setup in UIIT which is being run and managed by the students. The IT Society is also responsible for holding technology events, seminars and other extra-curricular activities of interests to students. It also provides a platform to students for interaction with IT Professionals in the industry, R & D and academics.

ATTENDANCE

Attendance in theory and practical classes is compulsory. The rules of the University as quoted below are strictly adhered to. Any student who fails the attendance condition, is not be allowed to sit in the examination. Condonation in attendance will be as per University rules.

As per Ordinance No. 13.3 (a, b, c)

- a) For every hour per week of subject shown in the schedule of teaching, there shall be at least ten lectures + tutorials/practicals/drawing classes during the semester. A student shall be eligible to appear in the examination only if he/she has attended at least 75% Lectures + Tutorials/ practicals/



drawing classes during the semester. The attendance record submitted by teacher concerned shall be certified by the Director, University Institute of Information Technology/ Principal of the Engineering College concerned.

- b) Director of Institute of Information Technology/ Principal of the Engineering College as the case may be, shall have the power to condone the shortage of attendance up to 10 per cent only per subject based on the merit of the case.
- c) A candidate who does not fulfill the attendance requirements in any subject will have to repeat the course of instruction in that subject.

Attendance record of the students is updated at the end of each month on the UIIT website (www.hpuitshimla.org/www.uiit.ac.in) for their information.

Absentee fine: A Student will be charged Rs 5/- per class/lecture for absenting from a theory or laboratory class.

CONDUCT AND DISCIPLINE OF STUDENTS:

- a) A student involved in the violation of any of the rules or regulations of the Institution or the university or in any way involved in any act of indiscipline, may be placed on conduct probation by the Head of the Institution. A student placed on conduct probation shall not be allowed to represent the Institution or the University in any meet, tournament, youth festival or cultural completion during the period of his Conduct Probation and shall also remain suspended from any office that he may be holding in any student's organization. If a student, who has been on conduct probation on two previous occasions, commits an act of indiscipline, he shall be dropped from the Institution/University.

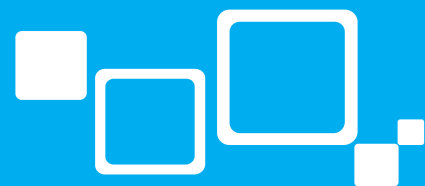
1. There shall be **NO RAGGING** in and outside the teaching departments of the University, College or Institutions affiliated to or maintained by the University or the hostels and also on road/ approaches leading to such Institutions/ Hostels.
2. Ragging means and includes any types of Physical or mental torture, done by any individual or group either by words or by conduct, which gives an apprehension in the mind of a person that he cannot pursue his studies free from any mental disturbance/torture created thereby.
3. The Chairman of the Teaching Departments/ heads of the Colleges or Institution affiliated to or maintained by the University, at the commencement of each session when new admission taken place shall have a written undertaking from every students (old or new) to the following effect:

"I have gone through the rules and regulations regarding ragging and discipline of the University/ College/ Institution and I hereby solemnly affirm that I will not indulge in any act of ragging/ indiscipline and that if I am found guilty of such offences as are covered under these rules. I will have no claim against the order of the rustication / expulsion from the University/ College / Institution."

4. If a Candidate is found indulging in ragging directly or indirectly, the competent authority, after enquiry, if satisfied, shall expel the guilty students(s) from the University/ College / Institution.

Note : Students found to have been involved in the act of RAGGING will be dealt with as per provision of Statue 23-A and recommendations of the Committee constituted by the Hon'ble Supreme Court of India in SLP. No. 24395 of 2006 (Raghvan's Committee Report)

5. Rustication and Expulsion of Students: Rustication shall mean the loss of one academic year i.e. the student concerned shall not be allowed to appear in any University examination during the academic year in which he is rusticated. The actual period of expulsion from the College or Institution shall depend upon the time of the year when the rustication order is passed. A rusticated student may with permission of the Head of the College or Institution Concerned rejoin the class in the same college or Institution after the time of rustication in the following academic year.
6. A student who is expelled from a College or Institution shall not be allowed to appear in any University examination during the academic year in which he is expelled and the next academic year and shall not thereafter be readmitted to the same or any other college or Institution without the prior sanction of the Vice – Chancellor. Each case of rustication or expulsion shall be reported to the Registrar of the University



immediately after the order is passed. A certificate signed by the College or Institution to the effect that the student has been given adequate and reasonable opportunity to explain his position before the order was passed, shall accompany the report.

7. All the students have to wear the uniform on all the working days when present in the campus. A fine of Rs.100/- per day will be imposed on those violating this condition.
8. **General:** In addition to whatever is there in this Document, the students will have to abide by the provisions of the H.P. University Act, Statutes, Ordinances, Rules and Regulation as may be framed and amended from time to time.

Note: In case of any contradiction/inconsistency between the provisions of ordinances and HVI/Proportions, the provision of ordinances/ statutes will prevail.

PRIZES AND SCHOLARSHIPS

A) Scholarships:

The students will be granted **four merit scholarships**, one for each year of B. Tech. (IT & CSE) course in UIIT. The amount of the scholarship will be Rs.500.00 per month. The basis of awarding merit scholarship is as given below:

1. **For 1st year:** on the basis of result of 10+2 examination passed by the candidate admitted in the first year. The duration of the scholarship will be one full academic session i.e. 1st July to 30th June.
2. **For 2nd year:** B. Tech. Part I result (semester I and II taken together). It will be for the duration of one full academic session i.e. 1st July to 30th June.
3. **For 3rd year:** B. Tech. Part I & II result (semester I, II, III and IV taken together). It will be for a duration of one full academic session i.e. 1st July to 30th June.
4. **For 4th year:** B. Tech. Part I, II & III (semester I, II, III, IV, V & VI taken together). It will be for the duration of one full academic session i.e. 1st July to 30th June.

B) Prizes:

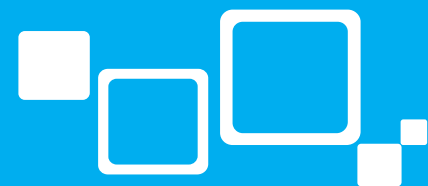
The Students will be given prizes in each year for standing First, Second and Third in the Semester examinations on the basis of aggregate marks scored in the semester examination. These prizes will be as given below:

1. Three prizes (I, II & III prize) on the basis of B. Tech. semester I result
2. Three prizes (I, II & III prize) on the basis of B. Tech. semester II result
3. Three prizes (I, II & III prize) on the basis of B. Tech. semester III result
4. Three prizes (I, II & III prize) on the basis of B. Tech. semester IV result
5. Three prizes (I, II & III prize) on the basis of B. Tech. semester V result
6. Three prizes (I, II & III prize) on the basis of B. Tech. semester VI result
7. Three prizes (I, II & III prize) on the basis of B. Tech. semester VII result
8. Three prizes (I, II & III prize) on the basis of B. Tech. semester VIII result

First prize will be given in the form of books costing Rs.1,000.00. Second prize in the form of books costing Rs.750.00 and the third prize in the form of books costing Rs.500.00. Students will be given coupons of the respective amounts for choosing books of their choice from the market.

C) General rules for the award of Scholarships/Prizes:

- i) All awards shall be made on the basis of Board/ University normal annual/semester examinations only. No award shall be given on the basis of result of the supplementary examination or on the basis of the result of a reappear case (excluding re-evaluation which will be counted). Further, provided that there should be no gap in the academic career between qualifying examination and the year in which the admission is sought for.
- ii) The award shall be given to the candidate/candidates who pass the qualifying examination in the first attempt at which he/she or they were due to appear, i.e. the candidate (s) getting a reappear in any of the semester (they are due to appear) of the qualifying examination, will not be considered at all for the award of the Scholarships/Prizes.



iii) Scholarships/ Prizes, shall be awarded for the period the students are required to pay tuition fee and shall be discontinued if the candidate does not show satisfactory attendance or fails to appear in the examination in which he was due to appear or gets a reappear in any paper or on unsatisfactory conduct. The Scholarships/ Prizes so vacated shall be awarded to the next eligible candidate of the same academic session.

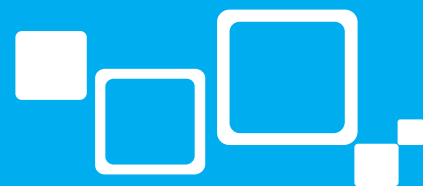
iv) If a Scholarship/Prize falls vacant, the same may be awarded for the remainder of the term to the next student available in order of merit in the respective session of the class concerned.

A Scholarship/ Prize awarded by the Institute shall be awarded only to candidate studying in University Institute of Information Technology (UIIT).

PLACEMENT CELL

The Institute has a dedicated/effective placement cell. It has been able to place a maximum number of students through its placement cell through on-campus as well as off-campus placements in the companies listed below:

S. No.	Batch	Name of the Company/ Industry
1	2001- 2005	Nucleus Software, Perot Systems, HCL Technologies, Cellebrum
2	2002-2006	HCL Technology, Perot Systems, Mahindra British Telecom, Nucleus Software, Infotech, R. Systems, Cellebrum, Smart Data Inc.
3	2003-2007	Perot Systems, HCL Technology, Impetus, Tech Mahindra, Satyam Computer Services, Smart Data Inc., RMS
4	2004-2008	Infosys, Satyam, Tech Mahindra, Mphasis, Impetus, Global Logic, Sierra Atlantic, Syntel (More than 90% students placed)
5	2005-2009	Infosys, L&T, Tech Mahindra, Smart Data
6	2006-2010	Tech Mahindra & Adobe, Smart Data, Infosys
7	2007-2011	Smart Data & Impetus, Global Logic, Tech Mahindra (28), Infosys
8	2008-2012	Smart Data & Impetus, Accenture, Tech. Mahindra, TCS, Cognizant, Persistent Technologies, HP
9	2009-2013	Tech Mahindra, Infosys, Global Logic, Mphasis, HP
10	2010-2014	Infosys, Tech Mahindra (22), Persistent Technologies, L&T, HP, Indian Air force, Indian Navy, Cognizant, Mphasis, TCS
11	2011-2015	Infosys (29 Students), Wipro Technologies (09), i-Gate (12), HP(02), L&T(08), Interactive Brokers (02; with a package of Rs.5 Lacs p.a.)
12	2012-2016	Wipro Technologies (52; with a package of 3.3 Lac p.a.) , i-Gate(40; with package of 3.2 Lac p.a.), Think & Learn Bangalore(02; with a package of 6 Lac p.a.), Infosys(01; with package of 3.5 lac p.a.), HP(01; with package of 3.5 Lac p.a.), TCS(Result expected by the end of March), IBM (1; with a package of 3.2 Lac p.a.) (80% students placed till February 2016).



ACADEMIC PROGRAMMES

Courses Offered

The UIIT imparts instructions for **Bachelor of Technology in Information Technology & Bachelor of Technology in Computer Science Engineering.**

Duration

The duration of B. Tech. course in Information Technology and Computer Science Engineering shall be of 4 years spread over **8 Semesters** on full time basis for fresh entry candidates and be of **6 Semesters** for Lateral Entry candidates (admitted directly in 2nd year).

HOSTEL FACILITY

Presently no hostel facility is available to the students of UIIT.

ADMISSION CRITERION (FRESH ENTRY TO 1st YEAR)

ELIGIBILITY

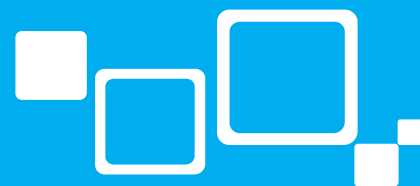
- The **eligibility is 10+2** examination or equivalent, passed with Physics, Mathematics and any one of the other elective subjects of a Board/University established by law in India with **50% marks** or equivalent grade. For SC/ST candidate's eligibility will be 45% marks or equivalent grades.
- In case of candidates studying in University/Board/College or School in a foreign country, the eligibility/qualifying examination will be the same as recognized equivalent to 10+2 by the University or the Association of Indian Universities with 50% marks in three subjects as detailed above in (a). For SC/ST candidates, eligibility will be 45% marks or equivalent grades.
- The candidate should not be, more than twenty-two years (22) in age as on 1st July of the year of admission.

ADMISSION CRITERION (LATERAL ENTRY)

For being eligible to seek admission to an Engineering Degree programme at the second year/third semester level, through lateral entry scheme, a candidate must fulfill any one of the following conditions:

- Should have acquired a diploma of 3 years in IT or CSE or ECE (after 10+2 or matriculation) preferably from Himachal Pradesh State Board of Technical Education or equivalent with minimum of 60% marks in aggregate from institute preferably located in H.P.
- Must have passed the Bachelor Degree in Science (B.Sc.), with Mathematics and Physics as subjects and minimum of 60% marks in aggregate from Himachal Pradesh University or any other recognised University/Institutions located in preferably Himachal Pradesh.
- A candidate seeking admission under sponsored category under the lateral entry scheme should have same eligibility as given in (a) or (b) above. The candidate should have minimum of 3 years' experience of working in Government sector /Public Sector Units /Industry related to Information Technology/ Computer Science Engineering. The candidates are required to produce the experience certificate from the employer along with (i) requisite leave of 3 years, (ii) salary statement/ at the time counseling. Form 16-A (of salary) for the last three years from the employer.
- The candidates, who have appeared in the final year/semester, but their result of Degree/Diploma course is awaited, can also apply. But, they should get their result cleared and show the pass certificate with requisite percentage on the date of counseling.

Provided further that the seat(s) remain vacant under lateral entry scheme from the bonafide Himachali candidates, then vacant seat(s) will be filled up from the candidates, who have passed the prescribed diploma or B.Sc. from other University/ Board with conditions of (a) or (b) mentioned above,



after exhausting all possibilities of filling these seats from bonafide Himachali candidates.

STUDENT INTAKE

FRESH ENTRY (1st SEMESTER): 60 + 6* + 1 + 3*** + 2\$ FOR EACH BRANCH.**

BASIS OF ADMISSION

For admission to all seats, a common entrance examination will be conducted by the University. **Separate merit lists for HIMACHALI candidates (passing 10+2 from schools within Himachal Pradesh) and ALL INDIA candidates (Open to all Candidates) will be prepared.**

Note :

- * 6 Seats are 10% of the sanctioned intake approved by the AICTE for the current year in B. Tech. IT & CSE each, over and above, to provide concession/programme fee waiver for - Women, Economically Weaker Section (Having annual income of parents/family less than Rs.2.5 lakh) & Physically Challenged meritorious students in the respective ratio of 2:3:1 as per AICTE norms.
- ** One seat over & above is reserved for Single Girl Child (only child of parents, that too a girl).
- *** Three Seat over and above are reserved for the wards of HPU Employee.
- \$ 2 supernumerary seats (over & above) are reserved for the bonafide domicile residents of Jammu and Kashmir.

LATERAL ENTRY (3rd SEMESTER): 06 + Any seat(s) remaining vacant at the level of 2nd year for each branch**

BASIS OF ADMISSION

For admission in Lateral Entry Scheme, a joint merit list will be drawn from the eligible candidates as mentioned in eligibility for Lateral entry.

****Note: 6 Seats are 10% of the sanctioned intake of the first year in B. Tech. (IT & CSE) over and above. Out of the allowed intake of 10% of the sanctioned seat under the lateral entry scheme, 1 seat i.e. 20% of this intake be admitted under the category of sponsored candidate.**

RESERVATION OF SEATS

15% and 7.5% of the seats shall be reserved for Scheduled Caste and Scheduled Tribes candidates, respectively. Further 3% of total seats are reserved for Physically Challenged (PC). Physically Challenged candidates will have to produce a certificate of minimum disability of 40% (issued by competent authority) at the time of counseling, to avail the reservation in PC category. Roaster applicable for this will be followed for deciding seats for SC, ST and PC categories separately.

The seats reserved for SC, ST and PC categories i.e. (22% + 7.5% + 3% = 25.5%) shall be filled as under:

- i) 40% of the seats for admission shall be open for all the candidates irrespective of the institution from where they have passed their qualifying examination.
- ii) 60% of the seats shall be filled out of the candidates who have passed their qualifying examination (10+2) from schools located within Himachal Pradesh.

The remaining 74.5% seats (100% - 25.5%) shall be filled as under:

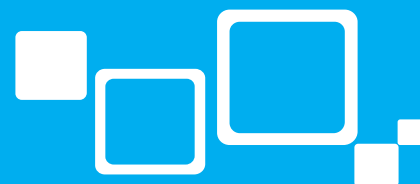
- i) 40% of the seats shall be open for all the candidates irrespective of the institution from where they have passed their qualifying examination.
- ii) 60% of the seats shall be filled out of the candidates who have passed their qualifying examination (10+2) from schools located within Himachal Pradesh.

FEE STRUCTURE

1. Tuition Fees (Per Semester)

(in Rs.)

45,000.00



On Admission

1. Laboratory Security (Refundable*)	10,000.00
2. Library Security (Refundable*)	2,000.00
3. Admission Fee	1,500.00

Annual Charges

1. Continuation fee	1,000.00
2. Sports fee	500.00
3. Medical Fee	100.00
4. Holiday Home Fee	25.00
5. Students Aid fund	10.00
6. Youth Welfare Fund	15.00
7. Identity Card Fee (to be paid in UIIT Fund)	100.00
8. House/ Sessional Exam fee (per Semester)	500.00
9. Breakage Fee (to be paid in UIIT Fund)	500.00
10. Magazine Fee	300.00
11. Annual function Charges	1000.00
12. Cultural Activity Fund	500.00
13. Common Room Charges	100.00
14. Placement Brochure and CD Fee	300.00
15. Development Fee (As approved by AICTE)	4,000.00

Semester Charges

1. Dilapidation Fee	600.00
2. Amalgamated Fund	1,200.00
3. Population/Education Club Fee	6.00
4. Faculty of Engineering & Infrastructure Development Fund	1,000.00

Examination Fee

1. Examination Fee per Semester (to be paid before the examinations as per University Schedule or as per University decisions from time to time)	2000.00
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University Registration fee (to be paid at the time of registration process)

1. For students passing 10+2 Exam for H.P. Board of School Education Students	200.00
2. For Others	400.00

* Refundable implies that after the candidate leaves/completes the course, the amount will be refunded back to the student after completing the official formalities.

WITHDRAWAL OF ADMISSION BY THE CANDIDATE AND REFUND OF FEE

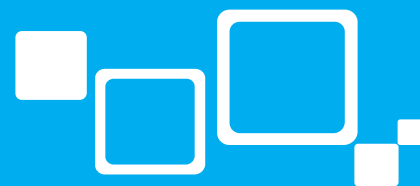
As per the direction of Ministry of Human Resource Development (MHRD) and University Grants Commission (UGC) a student admitted to the course can withdraw subject to following conditions:

- In the event of a student/candidate withdrawing before the starting of the course, the wait listed candidate shall be given admission against the vacant seat. The entire fee collected from the student after a deduction of the processing fee of not more than Rs.1,000/- (One thousand only) shall be refunded and returned by the Institution/University to the student/candidate withdrawing from the programme.
- If a student leave after joining the course and if the seat consequently falling vacant has been filled by next Candidate in waiting list by the last date of admission, the institution will return the fee collected with proportionate deductions of monthly fee and proportionate hostel rent, where applicable.
- If seat falls vacant after a student leaves the seat and remains vacant then only security will be refunded.

FEE PAYMENT SCHEDULE

For all categories of students:

7th to 21st of July of the academic year for odd semesters (i.e. III, V, VII)



7th to 21st of December of the academic year for even semesters (i.e. II, IV, VI, VIII)

Important Notes:

1. In case the fee is not deposited till the due date, late fee of Rs.1,000/- for first week & Rs.5,000/- for next fifteen days and failing which the name of the student will be automatically struck off from the rolls of UIIT.
2. Fee once deposited shall not be refunded.

ENTRANCE EXAMINATION (FRESH ENTRY TO 1st YEAR)

Candidates fulfilling the eligibility criteria will be called for common Entrance Examination for B. Tech (IT/CSE). The Entrance Examination will consist of two papers, each of two hours duration. In each paper, candidate will be required to answer 100 Multiple Choice Questions (MCQ) as detailed below.

Paper I		Paper II	
a) Physics	50 MCQ	a) Aptitude Test with Logical Reasoning	40 MCQ
b) Mathematics	50 MCQ	b) IT related GK	40 MCQ
		c) English (Language)	20 MCQ

Note: The syllabus for the entrance test has been provided in this prospectus.

EXAMINATION CENTRES

There will be four examination centers for the Entrance Test, two in Himachal Pradesh and two outside H.P.

Region	Examination Centre
Himachal Pradesh	Shimla, Dharamshala
Outside Himachal Pradesh	Chandigarh, Delhi

ADMIT CARD

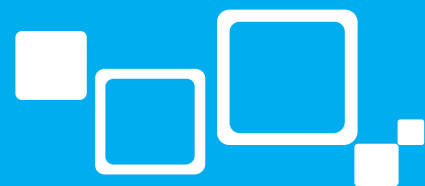
Admit cards for appearing in the entrance examination will be generated online only, to those candidates who have submitted their online application forms complete in all respect before or by the last date as notified by the University. Online Admit cards to such candidates will be activated after **30th May 2016** and candidates are advised to download the same after logging in to the online registration account created during the online submission of application. So, **candidates are advised not to forget their registration ID and password of account created for online application. No separate admit card will be issued to the candidates from UIIT.** Without the valid admit card, candidate will not be allowed to enter the examination hall. Admit card is to be retained by the candidate as he/she may have to produce the card at the time of counseling and admission or at any time during the admission process, when asked for.

DECIDING MERIT

The Merit shall be determined on the basis of aggregate marks obtained by candidates in the common entrance test and a common merit list shall be prepared for B. Tech. IT & CSE and admission will be given in the order of course preference given by candidate in the counseling form. In case of a tie i.e. student obtaining equal marks (aggregate) in the competitive examination, the issue shall be resolved according to higher marks obtained by the candidate in Paper-I of entrance test followed by marks obtained in Paper-II. Even if there is a tie in **inter-se** ranking after exhausting the above procedure, then the candidate older in age will be given preference.

COUNSELING

Dates of counseling and the list of candidates eligible to attend counseling will be displayed on UIIT website www.hpuiitshimla.org or www.uiit.ac.in. No other communication will be made in this regard. There will be a counseling system to allot the available seats in order of merit drawn category wise by the University. The eligibility of the candidates will be determined by the counseling committee (to recommend the admission to UIIT). **Final Merit will be decided only for**



those candidates who will appear for counseling in person as per counseling schedule. In case of unavoidable circumstances, the candidates who will not be able to appear in person, may depute an authorized person to convey his/her consent for the course, i.e. B. Tech. IT and CSE, with a **letter of authority** or intimate in writing his/her refusal for joining the said course, failing which the merit of the candidate will be cancelled. The committee will also prepare a waiting list and as soon as vacancy arises next candidate(s) from the waiting list will be allotted seat(s) in the UIIT. This information will be available on the UIIT website www.hpuiitshimla.org or www.uiit.ac.in and **no other mode of communication will be used in this regard.**

Important Notes: If candidate is unable to produce/bring original certificates at the time of counseling, his/her candidature will be rejected there and then by the committee constituted for counseling for B. Tech. (IT/CSE) course without any notice. **All disputes are subject to Judicial Courts in Shimla.**

SYLLABI OF ENTRANCE EXAMINATION

PAPER I: (A) PHYSICS

MECHANICS Unit and dimensions, displacement, velocity, acceleration, kinematics in one and two dimensions, projectiles, circular motion, concept of relative motion. Newton's laws of motion, concepts of inertial and uniformly accelerated frames. Force, spring force, frictional force, and gravitational force. Work, energy and power, momentum, conservation of momentum and energy. Linear and angular momentum, simple harmonic motion. Universal law of gravitation, gravitational potential and field, acceleration due to gravity, motion of planets and satellites in circular orbits, Kepler's laws.

System of particles, Center of mass and its motion, elastic and inelastic collisions. Rigid bodies, moment of inertia, parallel and perpendicular axes theorems, moment of inertia of simple geometrical shapes, i.e. uniform ring, disc, thin rod, cylinder. Angular momentum, its conservation, torque, equilibrium of rigid bodies.

Hook's law; Young's shear and bulk modulus. Principle of buoyancy, pressure in fluid, streamlined flow, Bernoulli's theorem.

Wave motion, concepts of amplitude, frequency and phase. Longitudinal and transverse waves, superposition of waves, progressive and stationary waves. Vibration of strings and air columns, resonance, beats, velocity of sound echo, Doppler effect.

HEAT AND THERMODYNAMICS Thermal expansion of solids, liquids and gases, ideal gas laws, absolute temperature, specific heats and their ratio, Isothermal and adiabatic processes. First law of thermodynamics. Calorimetry, latent heat, equivalence of heat and work, Heat conduction in one dimension, convection and elementary concepts of radiation. Stefan's law of radiation. Wien's displacement law, Newton's law of cooling. Elements of the kinetic theory of gases. Pressure and temperature of an ideal gas.

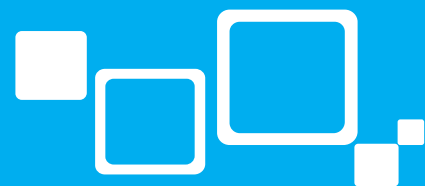
ELECTROSTATICS Coulomb's Law, electric field and electric potential, lines of force, capacitance, dielectric constant, parallel plate capacitor, capacitors in series and parallel. Energy stored in capacitor, charging and discharging of capacitor.

CURRENT ELECTRICITY Electric current, Ohm's law, series and parallel arrangements of resistance's and cells. Kirchhoff's laws and applications to networks. Heating effect of current. Biot-Savart's law, force on a moving charge and on a current carrying wire in a magnetic field, magnetic moment of a current loop, effect of a uniform magnetic field on a current loop, moving coil galvanometer, voltmeter, ammeter. Growth and decay of current in L-R and C-R circuits. Electromagnetic induction, Faraday's law, Lenz's law, definitions of self and mutual inductance. A. C Generator, LCR circuit with A.C. Phasor diagrams and L-C oscillations.

OPTICS Rectilinear propagation of light, light reflection and refraction at plane and curved surfaces. Total internal reflection and critical angle. Deviation and dispersion of light by a prism. Thin lenses, Spherical aberration, microscope, telescope. Wave nature of light, interference. Young's double slit experiment, fringe width, elementary concepts of diffraction by a single slit.

ATOMIC AND NUCLEAR PHYSICS Radioactivity: alpha, beta and gamma radiations, law of radioactive decay, decay constant, half-life and mean life Photoelectric effect. de-Broglie wavelength, Bohr's theory of hydrogen-like atoms. Production of characteristic and continuous X-ray. Atomic nucleus, binding energy and its calculation. Fission and fusion processes, energy calculation in these processes.

SEMICONDUCTOR PHYSICS AND ELECTRONICS Elementary concepts of metals. Insulators and semiconductors, Intrinsic and extrinsic semiconductors, p-n junction as an amplifier (in CE mode) and an oscillator with quantitative applications.



ALGEBRA Algebra of complex numbers, modulus and argument, triangle inequality, n th roots of unity. Theory of quadratic equations and quadratic expressions, relationship between the roots and coefficients, sign of a quadratic expression, greatest and least values of quadratic expression. Arithmetic geometric and harmonic progressions, sums of arithmetic, geometric and harmonic progressions, Infinite geometric series, sums of the squares and cubes of the first n natural numbers. Mathematical induction, permutations and combinations, Binomial theorem for a positive integral index. Determinants of order two and three, solutions of simultaneous linear equations in two and three variables.

TRIGONOMETRY Trigonometric functions and their graphs, addition and subtraction formulae, formula involving multiple and sub multiple angles, general solution of trigonometric equations, relations between the sides and angles of triangle, properties of a triangle, solutions of triangles, heights and distances, trigonometric functions.

ANALYTICAL GEOMETRY OF TWO DIMENSIONS Equation of straight line in various forms, angle between two lines, distance of a point from a line, line through the point of intersection of two given lines, concurrency of lines. Equation of a circle in various forms, equations of tangent and normal, intersection of a circle with a straight line, equation of a circle through the points of intersection of two circles and that of a circle and a straight line. Equations of the conic sections in the standard form, focus, directrix, eccentricity of the conic section, parametric equations, equations of tangent and normal

CALCULUS Into, onto and one-to-one functions, Sum, difference, product and quotient of two functions, composite function; absolute value, greatest integer, polynomial, rational, trigonometric, exponential and logarithmic functions, even and odd functions, inverse of a function. Limit and continuity of a function, limit and continuity of the sum, difference, product and quotient of two functions, continuity of composite function. Derivative of a function, derivative of composite and implicit functions, derivatives of polynomial, rational, trigonometric, inverse trigonometric, exponential and logarithmic functions. Geometrical interpretation of derivative, tangents and normal. Monotonicity, maximum and minimum values of a function. Derivatives upto order three.

INTEGRATION, DIFFERENTIAL EQUATIONS Integration as the inverse process of differentiation, integration by parts, integration by the methods of substitution and partial fraction, Definite integral and its application for the determination of areas. Properties of definite integrals. Formation of differential equations. First order equation, variables separable and homogeneous equations.

PROBABILITY Addition and multiplication laws of probabilities, conditional probabilities.

VECTORS Addition and vectors, scalar products, cross product, scalar and vector triple products, applications in geometry.

PAPER II

- | | |
|--|---|
| a) APTITUDE WITH LOGICAL REASONING: | It will consist of analytical and logical reasoning. |
| b) IT RELATED GENERAL KNOWLEDGE: | It will consist of General Knowledge related to IT and computers. |
| c) ENGLISH (LANGUAGE): | It will consist of English (language) to test the communication skills of candidates. |

SAMPLE QUESTIONS

PAPER I

PHYSICS

- Planck's constant has the dimensions of

a) Energy	b) Mass	c) Frequency	d) Angular momentum
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- The light travels as

a) Longitudinal waves	b) Mechanical waves	c) Transverse waves	d) Stationary waves
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- The photoelectric effect is based upon the law of conservation of

a) Momentum	b) Energy	c) Angular momentum	d) Mass
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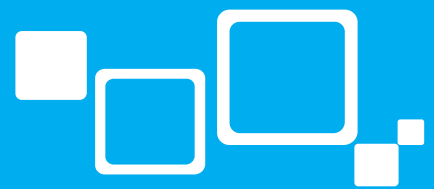
MATHEMATICS

- The value of $\cos 20^\circ \cos 40^\circ \cos 60^\circ \cos 80^\circ$ is

a) $1/8$	b) $1/20$	c) $1/16$	d) $1/32$
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- How many numbers having 6 digits, which are not divisible by 5, can be formed from the digits 4,5,6,7,8,9, no digit being repeated?

a) 720	b) 120	c) 620	d) 600
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PAPER II

**APTITUDE WITH LOGICAL REASONING**

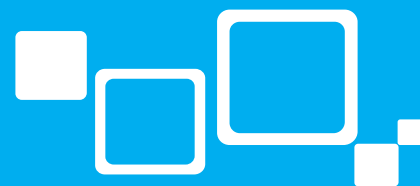
1. A man starts from a point and walks 3 km towards north. He turns right and walks 2km. Then he turns right and travels 3km. What is the direction he is now facing?
a) East b) West c) South d) North
2. Fill up the space 6 : 18 :: 4 : ?
a) 2 b) 6 c) 9 d) 12

IT RELATED GK

1. What does the acronym ISDN stand for?
a) Indian standard digital network b) Intelligent services digital network
c) Integrated services digital network d) Integrated services data network
2. Which of the following is not an Object Oriented Programming Language
a) C++ b) Smalltalk c) Cobol d) Visual C++
3. Modem is used to
a) Convert digital signal to analog signal b) Convert analog signal to digital signal
c) None of these d) Both (a) and (b)

ENGLISH LANGUAGE

1. The professor were traveling in UK, when he found his name in the list of successful noble prize winners ?
a) The professor was traveling b) The professor had been traveling
c) The professor were been traveling d) The professor have been traveling
2. Choose the word that is most nearly same in the meaning to the choice given below:
a) Sheer b) noisy c) astral d) Clever



FACULTY AND ADMINISTRATIVE

FACULTY

Prof. Manu Sood

Director

Dr. Wamik Azmi

Coordinator

Dr. Dharendra Sharma

Associate Professor (Programming)
& In-charge, Training & Placement

Dr. Praveen Kumar Sharma

Assistant Professor (Mathematics)

Dr. Shyam Chand

Assistant Professor (Physics)

Er. Balvir Singh Thakur

Assistant Professor (IT)

Er. Akshay Bhardwaj

Assistant Professor (IT)

Er. Anu Gaur

Assistant Professor (ECE)

Er. Ajay Lotheta

Assistant Professor (ECE)

GUEST FACULTY

Er. Kalpana Rangra

Ms. Alka Dixit

Ms. Minakshi Bhardwaj

Er. Sushant Patial

Er. Satish Kumar

Er. Payal Thakur

Er. Mrigana Walia

Ms. Pratishtha Gautam

Er. Niveditta Thakur

Er. Shivani Kanwar

Er. Divya Chauhan

Er. Jagat Dhiman

Er. Vishal Thakur

Er. Deepak Kumar

Er. Ajay Bali

Er. Satish Kumar

Er. Shakun Mehta

Er. Chitranjan Tanwar

Er. Ashok Kumar Kashyap

Dr. Kajal Thakur

COMPUTER LABORATORY

Dr. Dharendra Sharma

Associate Professor (Programming)

Mr. Rajesh Chauhan

System Administrator

Mr. Sunil Kumar

Programmer

Sh. Mahender Kumar

Laboratory Technician

Mr. Naresh Kumar

Laboratory Attendant

Mr. Vijay Thakur

Laboratory Attendant

Mr. Vikas Kumar

Laboratory Attendant

Mr. Babu Ram

Laboratory Attendant

Mrs. Sarla

Laboratory Attendant

OFFICE & LIBRARY STAFF

Sh. Ram Kumar Sharma

Section Officer

Sh. Naresh Kumar

Store Keeper cum Clerk

Sh. Sanjeev Kumar

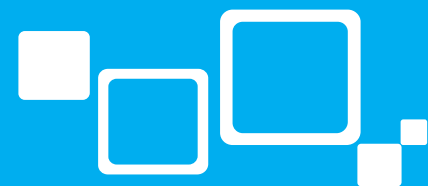
Library Attendant

Mrs. Poonam Panta

Clerk cum Data Entry Operator

Mrs. Sunita Devi

Peon



Course Outline

Four year Bachelor of Technology in Computer Science Engineering

Course Code	FIRST YEAR (1 st Semester)
AS-1001	Applied Mathematics-I
AS-1002	Applied Physics-I
ME-1001	Engineering Graphics
HU-1003	Communication & Professional Skills in English
EC-1001	Basic Electronics
CS-1001	Introduction to Computers & Programming in C
AS-1003	Applied Physics Laboratory
EC-1002	Basic Electronics Laboratory
ME-1002	Engineering Graphics Laboratory
CS-1002	Computer Programming Laboratory

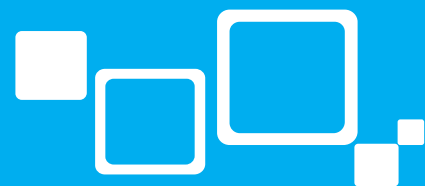
Course Code	FIRST YEAR (2 nd Semester)
AS-2001	Applied Mathematics-II
AS-2002	Applied Physics-II
CS-2002	Fundamentals of Computer Science & Technology
HU-2002	Science, Technology & Society
EE-2001	Basic Electrical Engineering
ME-2001	Basic Mechanical Engineering
EE-2002	Basic Electrical Engineering Laboratory
CS-2003	Computer Science Trainer Workshop
ME-2002	Basic Mechanical Engineering Laboratory
IT-1003	Matlab

Course Code	SECOND YEAR (3 rd Semester)
CS-3001	Numerical Analysis and Computer Programming
EC-3001	Digital Electronics
CS-3003	Data Structures
CS-3004	Computer Organization
CS-3002	Object Oriented Paradigm
CS-3005	Principal of Programming Languages
EC-3004	Digital Electronics Laboratory
CS-3006	Data Structure & Algorithm Laboratory
CS-3007	Object Oriented Programming Laboratory with C++
CS-3008	Numerical Analysis and Computer Programming Laboratory

Course Code	SECOND YEAR (4 th Semester)
CS-4001	Discrete Mathematics & Logic Design
CS-4002	Operating Systems
CS-4003	System Analysis and Design
CS-4004	Advanced Computer Architecture
CS-4004	Analysis and Design of Algorithms
CS-4005	Theory of Automata & Competition
CS-4006	Operating System Laboratory
CS-4007	Operating System Laboratory II (LINUX/ UNIX)
CS-4008	Analysis and Design of Algorithms Laboratory
CS-4009	SAD Project

Course Code	THIRD YEAR (5 th Semester)
CS-5001	Software Engineering
CS-5002	Database Management System
CS-5003	Principles of Engineering Economics & Management
EC-5001	Microprocessor Theory & Applications
CS-5004	Web Technologies
CS-5005	Compiler Design
CS-5006	RDBMS Laboratory
CS-5007	Web Technologies Laboratory
EC-5002	Microprocessor Laboratory
CS-5008	Vocational Training

Course Code	THIRD YEAR (6 th Semester)
CS-6001	Modeling & Simulation
CS-6002	Computer Graphic & Multimedia
CS-6003	Computer Networks
CS-6004	Statistical Methods
CS-6005	Core Java Programming
EC-6001	Digital Communications
CS-6006	Java Programming Laboratory
CS-6007	Modeling & Simulation Laboratory
EC-6002	Computer Networks Laboratory
CS-6008	Computer Graphics Laboratory



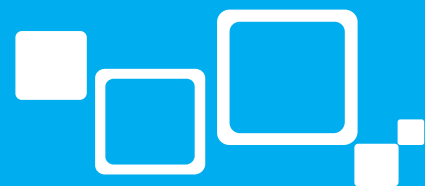
Course Code	FOURTH YEAR (7 th Semester)
CS-7001	Information Security
CS-7002	Artificial Intelligence
CS-7003	Mobile Computing
CS-7004	E-Commerce & ERP
CS-7005	Advance Java Programming
XX-XXXX	Professional Elective-I
CS-7006	Advance Java Programming Laboratory
CS-7007	E-Commerce & ERP Laboratory
CS-7008	Project-I
CS-7010	Artificial intelligence Laboratory
CS-7009	Vocational Training

Course Code	FOURTH YEAR (8 th Semester)
CS-8001	Data Warehouse and Data Mining
CS-8002	Soft Computing
CS-8003	Distributed Systems
XX-XXXX	Open Elective
XX-XXXX	Professional Elective-II
IT-8004	Project-II
IT-8005	Project Seminar
IT-8016	General Proficiency

Course Code	Professional Elective-I
CS-7010	Software Quality Engineering
CS-7011	Communication protocol Engineering
CS-7013	Designs of Embedded Systems
CS-7015	Global Positioning Systems

Course	Open Elective-II
CS-8007	Mobile Computing
ES-8001	Neural Networks
CS-8008	Real Time Systems
CS-8009	Software Verification, Validation & Testing
CS-8010	Computer Network Management
CS-8011	Digital Image Processing

Open Electives	
CS-8020	Object Oriented Software Engineering
EC-8021	Computational Complexity
CS-8018	Software Project Management
EE-8009	Computational Geometry
CS-8020	Bioinformatics
CS-8021	Communication Network Security
CS-8023	Storage Technologies
HU-8021	Mathematics & Quantitative Techniques For Financial Decisions
CS-8022	Adhoc Networks
CS-8019	Parallel Algorithms
CS-8024	Fuzzy Systems
ME-8021	Digital Speech Signal Processing
CS-8022	Disaster Management
CS-8025	Mobile Application Development
CS-8026	Cloud Computing
CS-8027	Intrusion Detection System
CS-8028	Wireless Communication



Course Outline

Four year Bachelor of Technology in Information Technology

Course Code	FIRST YEAR (1 st Semester)
AS-1001	Applied Mathematics-I
AS-1002	Applied Physics-I
ME-1001	Engineering Graphics
HU-1003	Communication & Professional Skills in English
EC-1001	Basic Electronics
CS-1001	Introduction to Computers & Programming in C
AS-1003	Applied Physics Laboratory
EC-1002	Basic Electronics Laboratory
ME-1002	Engineering Graphics Laboratory
CS-1002	Computer Programming Laboratory

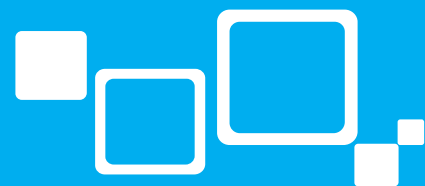
Course Code	FIRST YEAR (2 nd Semester)
AS-2001	Applied Mathematics-II
AS-2002	Applied Physics-II
CS-2002	Fundamentals of Computer Science & Technology
HU-2002	Science, Technology & Society
EE-2001	Basic Electrical Engineering
ME-2001	Basic Mechanical Engineering
EE-2002	Basic Electrical Engineering Laboratory
CS-2003	Computer Science Trainer Workshop
ME-2002	Basic Mechanical Engineering Laboratory
IT-1003	Matlab

Course Code	SECOND YEAR (3 rd Semester)
IT-3001	Computer Organization
IT-3002	Object Oriented Programming
IT-3003	Data Structures & Algorithms
IT-3004	Database Management System
EC-3001	Digital Electronics
AS-3002	Principal of Engineering Economics & Management
EC-3004	Digital Electronics Laboratory
IT-3005	Data Structure Laboratory
IT-3006	Object Oriented Programming Laboratory
IT-3007	RDBMS Laboratory

Course Code	SECOND YEAR (4 th Semester)
IT-4001	Management Information System
IT-4002	Operating System
IT-4003	Computer Networks
EC-4010	Digital & Data Communication
IT-4004	System Analyses And Design
IT-4005	Human Computer Interaction
IT-4006	Operating System Lab
EC-4011	Digital and Data Communication Laboratory
IT-4007	SAD Project
IT-4008	Computer Network Laboratory

Course Code	THIRD YEAR (5 th Semester)
IT-5001	Software Engineering
IT-5002	Computer Graphics
IT-5003	Analyses & Design of Algorithms
IT-5004	Visual Programming
EC-5001	Microprocessor, Micro Computers & Interfaces
IT-5005	Discrete Structures
EC-5005	Microprocessor Laboratory
IT-5006	Visual Programming Laboratory
IT-5007	Computer Graphic Laboratory
IT-5009	Vocational Training

Course Code	THIRD YEAR (6 th Semester)
IT-6001	Object Oriented Software Engineering
IT-6002	Web Technology
IT-6003	Artificial Intelligence
IT-6004	Computer Network Management
IT-6005	Parallel Computing
IT-6006	Core Java
IT-6007	Artificial Intelligence Laboratory
IT-6008	Web Technology Laboratory
IT-6009	Parallel Computing Laboratory
IT-6010	Core Java Laboratory



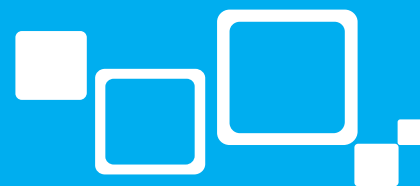
Course Code	FOURTH YEAR (7 th Semester)
IT-7001	Natural Language Processing
IT-7002	Modeling & Simulations
IT-7003	e-Commerce & ERP
IT-7004	Advance Java
EC-7012	Wireless Communication
XX-XXXX	Professional Elective-I
IT-7005	Advance Java Laboratory
IT-7006	Modeling & Simulation Laboratory
IT-7007	e-Commerce Laboratory
IT-7008	Project-I
IT-7016	Vocational Training

Course Code	FOURTH YEAR (8 th Semester)
IT-8001	Multimedia Technology
IT-8002	Information Systems Security
IT-8003	Data Warehouse and Data Mining
XX-XXXX	Open Elective
XX-XXXX	Professional Elective-II
IT-8004	Project-II
IT-8005	Multimedia Technology Lab
IT-8016	General Proficiency

Course Code	Professional Elective-I
IT-7010	Software Maintenance
IT-7011	Cobra/XML
IT-7013	Design of Embedded Systems
IT-7015	GIS/Remote Sensing

Course	Professional Elective-II
IT- 8006	GPS and Application
IT-8007	Mobile Computing
ES-8001	Neural Networks
IT-8008	Multilingual Applications
IT-8009	Speech image & coding
IT-8011	Digital Image Processing
IT-8015	Bio-Informatics

Open Electives	
EC-8020	Communication System
EC-8021	Reliability of Electronics Communication System
EE-8008	Non Conventional Electrical Power Generation
EE-8009	Energy Assessment and Auditing
CS-8020	Computer Software Testing
CS-8021	Computer Network & Security
HU-8020	Entrepreneurship Development & New Enterprise Management
HU-8021	Accounts & Financial Management
HU-8022	Total Quality Management
ME-8019	Advanced Operations Research
ME-8020	Industrial Management
ME-8021	Optimization Methods of Engineering System
CS-8022	Disaster Management
CE-8023	Environmental Pollution & Management
CE-8024	Remote Sensing & GIS



INSTRUCTIONS FOR FILLING ONLINE APPLICATION FORM FOR **PRAVESH UIIT-2016**

(This application is compatible with Internet Explorer 7 or above, Google Chrome & Mozilla Firefox.)

All the applicants are advised to read the Prospectus/information brochure of University Institute of Information Technology, H.P. University, Shimla-171 005 in pdf format available on www.hpuiitshimla.org or www.uiit.ac.in & www.hpuniv.in, carefully and also ensure their eligibility in terms of the conditions/provisions mentioned in the information brochure.

Please read these instructions carefully before proceeding with the ONLINE filling of B. Tech. (IT/CSE) Entrance Application Form 2016.

ADMISSION CRITERION (FRESH ENTRY TO 1st Year)

Eligibility

- The eligibility is 10+2 examination or equivalent, passed with Physics, Mathematics and any one of the other elective subjects of a Board/University established by law of India with 50% marks or equivalent grade. For SC/ST Candidate's eligibility will be 45% marks or equivalent grades.
- In case of candidates studying in University/Board/College or School in a foreign country, the eligibility/qualifying examination will be same as recognized equivalent to 10+2 by the University or the Association of Indian Universities with 50% marks in three subjects as detailed above in (a). For SC/ST candidates, eligibility will be 45% marks or equivalent grades.
- The candidate should not be more than twenty-two years (22) in age as on 1st July of the year of admission.

STUDENT INTAKE

➤ **Fresh Entry (I Semester): Total Seats: 60 + 6* + 1** + 3*** + 2\$ For Each Branch**

Basis of Admission

For admission to all seats, a common entrance examination will be conducted by the University. Separate merit lists for **HIMACHALI** (passing 10+2 from school located in Himachal Pradesh) candidates and **ALL INDIA** Category (Open to all Candidates) will be prepared.

*** Note:** 6 Seats are 10% of the sanctioned intake approved by the AICTE for first year in B. Tech. (IT) & B. Tech. (CSE) each over and above, to provide concession/programme fee waiver for Women, Economically Weaker Sections (Having annual income of parents/family less than Rs.2.5 lakh) and Physically Challenged meritorious students in the ratio of 2:3:1 as per AICTE norms.

****** One Seat over & above is reserved for Single Girl Child (*Parents having only one child i.e. Girl only*)

******* Three Seat over and above are reserved for the wards of H.P. University Employee.

\$ 2 supernumerary seats (over & above) are reserved for the bonafide domicile residents of Jammu and Kashmir.

Important Dates:

- | | |
|---|-------------------|
| 1. Online filling up of B. Tech. (IT/CSE) Entrance Application form commences from | 21.03.2016 |
| 2. Last date for filling up the ONLINE B. Tech. (IT/CSE) Entrance Application Form | 20.05.2016 |
| 3. Last date for submitting the hard copy of B. Tech. (IT/CSE) Entrance Application Form in UIIT office by post (<i>through registered post only</i>) or by hand is | 26.05.2016 |
| 4. Admit Cards download begins on www.hpuiitshimla.org , www.hpuniv.in with effect from | 30.05.2016 |
| 5. Date of Entrance Examination | 05.06.2016 |

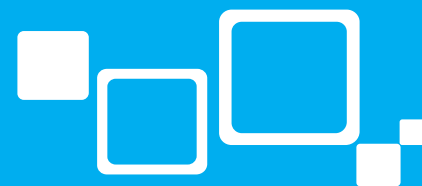
Important Steps

(A) **Before proceeding to apply, please ensure that you have:**

(i) **Scanned copy of applicant's recent photograph with following specifications.**

- Photograph must be a passport size color picture.
- Photograph must be taken in full face view directly facing the camera.
- Photograph should have no shadows and red eyes.
- Maximum size **50 KB**.
- Photo format should be jpg. only.

(ii) **Scanned copy of applicant's signature with following specifications.**



- Applicant should sign with **black ink** on a white paper and get the signature scanned.
- The signature must be signed only by the applicant and not by any other person.
- Maximum size **30 Kb**.
- Scanned signature format should be **jpg**. only.

(B) Create an email account if you already don't have one.

(C) You must give a mobile number in basic details. If you don't have mobile number, please enter your guardian's mobile number for any further correspondence in this regard.

(D) Instructions for filling the ONLINE APPLICATION FORM FOR PRAVESH UIIT-2016:

1. Click on **"Register Now"** to create a new account. Once the new account is created online system *will generate the unique application form number*. Applicants are advised to *note down the application form number for all future references*.
2. After account creation, click **login** to complete the Entrance Examination application online. Online Entrance Application form has following subsequent information.
 - Basic Details Form
 - Upload Photo & Signature Form
 - Fees Payment Form
 - Payment Details Form
 - Filled Form View Page Confirmation Button.
 - Filled Form Downloaded Page.
3. Applicants are required to fill their information in above mentioned web pages. All mandatory fields are marked with red star.
4. Upload photo and signature. Photo and signature uploaded should be as per specifications and size listed in step (A).
5. To save the data please click on **'Continue and Save' button** at the bottom of each screen before proceeding further.

6. Steps for making Application Fees Payment

- a) Once you click on **Fees Payment Button** new window of **SBI-Collect** will be open on your screen in which you have to complete the following steps for making the payment:

Step 1

- a) State of Corporate/ Institution : <Select> **Himachal Pradesh**
 b) Type of Corporate/Institution: <Select> **Educational Institution**

Then click on **Go** button

Step 2

- a) Educational Institution Name: <Select> **Director UIIT**

Then click on **Submit** button

Step 3

- a) Select Payment Category: <Select> **Application Fee**

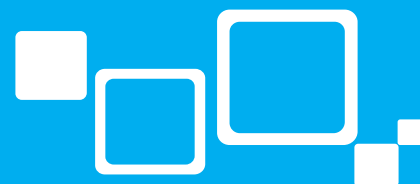
Step 4

Enter all the details of payment as per the fields given on the present screen, all these fields are mandatory to fill for making the Application fee payment. Then press the **Submit** button.

Step 5

Once you **Confirm** the 'payment details', a new window will appear on your screen in which three modes of payment are there i.e. 1) **Net Banking** 2) **Card Payment** (By Using Debit/Credit Card) 3) **Other Payment modes** in which Challan is generated and the applicant has to take the print out of that Challan to the nearest SBI Branch for depositing the Cash. After depositing the Cash, the bank will issue the receipt/ Journal No. on the Challan. In case of Net Banking and Card Payment, e-receipt will be generated. Then applicants are directed to take print out of that e-receipt for completing the application form and retained for his/her record purpose also.

7. After depositing the fee in the bank, re-login to your account, at least after 8 hours to enter payment details, i.e. e-receipt/ Journal number as provided by the bank at the time of depositing the fee, in **Payment details page**.
8. Click on **Save & Continue** to see your filled application details on the computer, before proceeding further please make sure that all the fields are filled in correctly in the confirmation screen before clicking the **Submit** Button. **Once you click on the Submit button of your application page, you cannot Edit/Change the details entered.**
9. After clicking on **Submit button** new window will appear on the Screen displaying full details of the applicant which you have entered in the application form. Take the print out of the same page and **attach the photocopy of payment**



receipt along with the application form and sent it by registered post with the quote on the envelope “Application for B. Tech. (IT/CSE) Entrance Test, PRAVESH UIIT-2016” at following address:

O/o The Director,
University Institute of Information Technology (UIIT),
H.P. University, Gyan Path, Summer Hill, Shimla – 171 005 (H.P.)

Important Notes:

- Do not make any changes with the pen on the details printed on the print out of your application form; otherwise your application form will be rejected straightforward.
- Before sending the form to University Institute of Information Technology, the applicant should make sure that Parent/Guardian has countersigned the application form in original on space provided in the application form.
- For any queries please contact- 0177-2831655, 2833582

INFORMATION TO BE FILLED UP IN THE ONLINE APPLICATION FORM FOR ENTRY INTO B. TECH. (IT/CSE) 1st YEAR

GENERAL INSTRUCTIONS:

NAME OF THE CANDIDATE: Write your name in capital letters as given in matriculation certificate.

NATIONALITY: Select appropriate option, whichever is applicable to you.

SEX: Select appropriate option, whichever is applicable to you.

CATEGORY: Select appropriate option out of these four categories, whichever is applicable to you.

SINGLE GIRL CHILD (only child of parents, that too a girl): Select Yes or No, whichever is applicable to you.

ECONOMICALLY WEAKER SECTION: Select Yes or No, whichever is applicable to you. Those candidates whose annual income of parents from all the sources is less than Rs.2.5 lakh are considered Economically Weaker Section, as per AICTE norms and such meritorious admitted students will be considered for fee waiver.

WARD OF H.P. UNIVERSITY EMPLOYEE: Select Yes or No, whichever is applicable to you.

DATE OF BIRTH: Select the date, month and year of your birth as per the English calendar and as recorded in your 10th/High School Board Examination Certificate.

J & K BONAFIDE: Are You a bonafide Domicile resident of Jammu & Kashmir? Select Yes or No, whichever is applicable to you.

EXAMINATION CENTRE PREFERENCE: Select appropriate option as per your choice. An examination center may be discontinued due to poor response, operational difficulties or any reason whatsoever. Candidates may not necessarily be allotted a particular city/town as examination center of their choice.

QUALIFYING EXAM PASSED FROM a) BOARD b) 10+2 school located in state

Select appropriate option, whichever is applicable to you.

PHONE NUMBER: Write your phone number (preferably mobile no), if any, on which you can be contacted or a message can be left in case of exigency.

FATHER'S NAME: Write the name of your father as given in matriculation certificate.

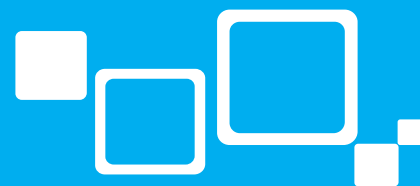
RELIGION: Select appropriate option, whichever is applicable to you.

DECLARATION BY THE CANDIDATE: The candidate must sign this declaration with the digital signatures (for which you simply need to upload your scanned signature at the moment when asked to do so).

Last date of online submission: ON OR BEFORE 20-05-2016 (20th MAY 2016)

SUBMISSION OF APPLICATION FORM FOR LATERAL ENTRY (ENTRY into B. Tech. 2nd Year)

There is a separate, application form for lateral Entry into the B. Tech. (IT/CSE) 2nd year. **The Lateral Entry candidates are not required to fill online application form.** They are advised to download the



PDF format of application form for lateral entry scheme from UIIT website www.hpuiitshimla.org or www.hpuniv.in . Fill the form with the help of blue or black ball point pen and also attach two latest passport size photographs, attested copies of the certificate of Matric for verification of Age, Result card/Marks card of qualifying examination i.e. Diploma and SC/ST/PC Category certificate with this form, one stamped (ready for registered post) self addressed envelope of size 9"x 4" and **a bank draft of Rs. 1000/- in favour of Director UIIT, H.P. University Shimla-171005.** If you are applying under Sponsored Category, attach Sponsorship Certificate and NOC from the employer. All the above enclosures should be enclosed in an envelope and same be submitted by post or by hand to:

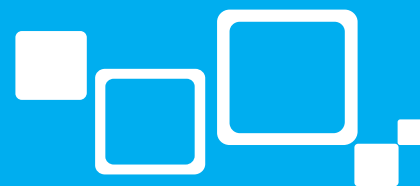
**The Director,
University Institute of Information Technology,
Netaji Subhash Chandra Bose Bhawan, (II-Basement),
Himachal Pradesh University,
Gyan Path, Summer Hill, Shimla, H.P. -171005.**

Last date of Submission: ON OR BEFORE 20-05-2016 (20th MAY 2016)

Write "Lateral Entry Application" on top of this envelope.

Important Notes: Fee once deposited or received will not be refunded. No application form will be entertained after the last date i.e. **20.05.2016.**

The application form for lateral entry can be downloaded from UIIT website www.hpuiitshimla.org or www.hpuniv.in



FORMAT OF APPLICATION FORM FOR LATERAL ENTRY

UNIVERSITY INSTITUTE OF INFORMATION TECHNOLOGY HIMACHAL PRADESH UNIVERSITY SHIMLA-171005 APPLICATION FORM FOR CANDIDATES SEEKING LATERAL ENTRY TO B. TECH. (IT) AND B. TECH. (CSE) THIRD SEMESTER (SECOND YEAR)

(NOTE: Please fill this form and also attach two latest passport size photographs, attested copies of the certificate of Matric for verification of Age, Result card/Marks card of qualifying examination i.e. Diploma and 10+2 and SC/ST/PC Category certificate with this form, one stamped (ready for registered post) self-addressed envelope of size 9" × 4" and a **crossed bank draft of Rs. 1000/- in favour of Director, UIIT, H.P. University Shimla-171005**. If you are applying under Sponsored Category, attach sponsorship Certificate and NOC from the employer.

Those candidates who have appeared in final semester but result of diploma is awaited can also apply. But they will have to produce the same at the time of counselling.)

1. Name of the Candidate (In Capitals) : _____

2. Father's Name : _____

3. Date of Birth (As in Matric certificate) : _____

4. Age on 1st July, 2016
(in years, months and days) : _____

5. Category (SC/ST/Gen/PC) : _____

6. Diploma/degree institute/college located in state
(HP/Other than HP) : _____

7. Category sponsored (Yes/No) : _____

Affix a passport size
Colour photograph

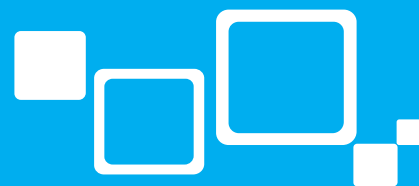
8. Details of Qualifying Exam :
(Diploma/B.Sc.) (Attach attested copies of certificate)

S. No	Year Wise Detail	Marks obtained	Total Marks	Percentage	Result (Pass/Result awaited)
1	1 st Year				
2	2 nd Year				
3	3 rd Year				
4	Total of all the 3 years				

9. E-mail ID of candidate : _____

10. Mobile No./Landline No. : _____

11. Bank Draft Details : Draft No. _____ Amount: _____
: Name of Issuing Bank: _____
: Date : _____



12. Address for Correspondence : _____

PIN CODE _____

13. I certify that the information given is correct and if any discrepancy is found at any stage in this information, my admission may be cancelled.

Signature:

Parent's/Guardian Signatures

(Name in Block letters)

=====

FOR OFFICE

a) In order

☐

b) Not in order

☐

(Checked by)

(Checked by)

=====

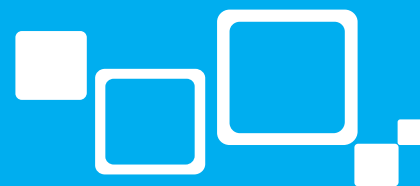
NOTE:

Eligibility:

For being eligible to seek admission to an Engineering Degree programme at the second year/third semester level, through lateral entry scheme, a candidate must fulfill any one of the following conditions:

- Should have acquired a diploma of 3 years in IT or CSE (after 10+2 or matric) preferably from Himachal Pradesh State Board of Technical Education or equivalent with minimum of 60% marks in aggregate from institute preferably located in H.P.
- Must have passed the Bachelor Degree in Science (B.Sc.), with Mathematics and Physics as subjects and minimum of 60% marks in aggregate from Himachal Pradesh University or any other recognised University/Institutions located preferably in Himachal Pradesh.
- A candidate seeking admission under sponsored category under the lateral entry scheme should have same eligibility as given in (a) or (b) above. The candidate should have minimum of 3 years experience of working in Government sector /Public Sector Units /Industry related to Information Technology/ Computer Science Engineering. The candidates are required to produce the experience certificate from the employer along with (i) requisite leave of 3 years, (ii) salary statement/ at the time counseling. Form 16-A (of salary) for the last three years from the employer.
- The candidates, who have appeared in the final year/semester, but their result of Degree/Diploma course is awaited, can also apply. But, they should get their result cleared and show the pass certificate with requisite percentage on the date of counseling.

Provided further that the seat(s) remain vacant under lateral entry scheme from the Himachali candidates, then vacant seat(s) will be filled up from the candidates, who have passed the prescribed diploma or B.Sc. from other University/ Board with conditions of (a) or (b) mentioned above, after exhausting all possibilities of filling these seats from Himachali candidates.



IMPORTANT DATES

1. Date of activation of online submission form (**Fresh entry**)
or download of Application form (**Lateral entry**) : **21-03-2016**
2. Last Date of submission of application form : **20-05-2016**
3. Last Date for submission of PDF of application form in UIIT office : **26-05-2016**
4. Date from which the admit cards would be available for downloading : **30-05-2016**
5. Date of Entrance test for Fresh entry : **05-06-2016**
6. Date of Declaration of Entrance Exam Result : **22-06-2016**
7. Display of Counseling Schedule on UIIT website for fresh entry : **25-06-2016**
8. Date of First counseling for fresh entry : **01-07-2016**
9. Date of counseling for Lateral entry : **25-07-2016**
10. Date of Commencement of Classes (for all semesters) : **30-07-2016**
11. Last Date of withdrawal of admission without deductions
(except processing charges of Rs.1000/- only) : **30-07-2016**
12. Last date of admission : **14-08-2016**
12. Last date of admission (with permission of Hon'ble Vice-Chancellor) : **28-08-2016**