The ICFAI University, Jaipur
Faculty of Science & Technology

ICFAI UNIVERSITY

Student Handbook

B. Tech. 2012-16

PREFACE

This student handbook is designed with an intention to provide the students with essential information on the operational features, course curriculum, academic and other regulations, which they are bound to follow during the stay at The ICFAI University, Jaipur. In addition to this, the students are required to go through the Academic Regulations of the University.

Contents

Academic Calendar* 2012-2013
(B.Tech)

	Activity	Date
First Semester	First Semester starts with Registration	1st August 2012
	Class work starts	2nd August 2012
	Late Registration	8th August 2012
	Test I	3rd - 6th September 2012
	Mid-Semester Examination	1st - 05th October 2012
	Last day for withdrawal from courses	8th October 2012
	Test III	30th October - 2nd November 2012
	Last day for class work	30th November 2012
	Comprehensive Examinations	3rd -11th December 2012
	First Semester ends	13th December 2012
	Vacations	
Second Semester	Second Semester starts with Registration	02nd January 2013
	Class work starts	03rd January 2013
	Late Registration	9th January 2013
	Test I	30th - 01st February 2013
	Mid-Semester Examination	27th - 1st March 2013
	Last day of withdrawal from courses	8th March 2013
	Test III	23rd - 5th April 2013
	Last day for class work	3rd May 2013
	Comprehensive Examinations	6th May -14th May 2013
	Second Semester ends	16th May 2013
Summer Term	Internship Program I begins	27th May 2013
	Internship Program I ends	19th July 2013

* Subject to change

PART - I

Faculty of Science and Technology

1.1 The ICFAI University, Jaipur

The ICFAI University, Jaipur (hereinafter referred as the University) was established under the provisions of The ICFAI University, Jaipur Act (No. 26 of 2011) of the state of Rajasthan. The University is sponsored by the Institute of Chartered Financial Analysts of India (ICFAI), a not-for-profit educational society established in 1984 under the Andhra Pradesh Public Societies Registration Act, 1350 Fasli (Act 1 of 1350F).

The University believes in creating and disseminating knowledge and skills in core and frontier areas through innovative educational programs, research, consulting and publishing, and developing a new cadre of professionals with a high level of competence and deep sense of ethics and commitment to the code of professional conduct.

A number of full time campus based educational programs are offered in Management and Science & Technology at bachelor and master levels.

1.2 FST

Faculty of Science and Technology (FST) is a constituent of the University. It has been established to promote quality education and training in the fields of Science and Technology to match international standards.

1.3 B.Tech. Program

The University offers campus-based, full-time B.Tech. Degree program of four years duration at the FST. The program consists of eight semesters of study, leading to a Bachelor's degree.

The B.Tech. Degree program provides cutting-edge education to equip students with comprehensive and critical understanding of their respective fields of study.

The following are the branches of engineering that are currently offered at FST:

- Civil Engineering (CE)
- Computer Science & Engineering (CSE)
- Electronics & Communication Engineering (ECE)
- Mechanical Engineering (ME)

1.4 Eligibility and Admissions

Students who pass 10+2 or its equivalent with Mathematics, Physics and Chemistry and secure a minimum of 50% marks in aggregate are eligible to apply for admission into the B.Tech. Program.

Students, whose 10+2 results have not been declared at the time of admission, are given Provisional Admission to the B.Tech. Program. The admission is subject to their submitting proof of clearing the prescribed eligibility criteria for admission on or before the specified date. If a provisionally admitted student fails to submit the proof of completion of the above criteria on or before the specified date, his admission to the program shall stand cancelled and the student will cease to be on the rolls of FST and will not be permitted to participate in any activity of the University. The medium of instruction is English, and hence adequate knowledge of English is required.

1.5 The Academic Year

The academic year is divided into two Semesters and a Summer Term. Each semester is of 18 weeks and summer term is of 8 weeks duration. There are eight semesters during the four year B.Tech program.

After completing the first two semesters, the students undertake English Language Skill for one month. After completing the first four semesters, the students undertake Soft Skills for one month.

During the final year, students undertake five and half month Internship Program (IP) in either of the two semesters and part of the adjoining summer term. In lieu of the Internship Program, a student may opt for Thesis/Seminar in the final year.

PART - II

B.Tech. Program Details

2.1 Structure of B.Tech. Program

FST constantly endeavours to update the curriculum, benchmark the academic delivery against best academic standards and create a better environment for the students. The B.Tech. Programs encourage the future professionals to equip themselves with the latest tools and techniques in the field of Science and Technology.

These programs have been structured so as to identify and understand the commonality as well as the divergence amongst them. The eligibility for a degree is determined on the basis of the number of units completed. Each course has a prescribed weightage in terms of units. The semester-wise program consists of a prescribed set of courses adding to a certain total number of units in each semester for an anticipated normal progress through the program.

A 'unit' is a convenient means to anticipate the number of hours per week of the total effort, including the class work put in by the student. For details see academic regulations of the university.

The program of studies leading to the award of a B.Tech degree consists of the prescribed courses sequentially distributed over the required number of semesters known as Semester-wise Patten. The current operative semester-wise pattern for the degree programs is given in Table-1. The program is planned in such a way that in the normal course, a student will complete the program in 8 semesters. The duration of degree program for a student can be shorter or longer than the normal duration due to the academic flexibilities and the student's ability. The eligibility for a degree is determined on the basis of number of courses or units completed. The minimum stipulated number of units for any B.Tech program is 145 units.

Table-1: Semester-wise Pattern

B.Tech. Program Structure

Year	First Semester	Second Semester II
I	Mathematics I	Mathematics II
	Physics I	Physics II
	Chemistry	Environmental Science
	Physical Sciences Laboratory I	Physical Sciences Laboratory II
	Thermodynamics/Engineering Mechanics	Engineering Mechanics/ Thermodynamics
	Workshop Practice/Engineering Graphics	Engineering Graphics/ Workshop Practice
	Computer Programming I	Computer Programming II
Summer Term		
II	Structure and Properties of Materials	Measurement Techniques
	Mathematics III	Electrical Science II
	Technical Report Writing/ Principles of Management	Principles of Management/Technical Report Writing
	Electrical Science I	Discipline Courses (3)
	Probability and statistics	
	Discipline Course (1)	
Summer Term	**Internship Program I**	
III	Mathematics Elective	Humanities and Social Sciences Elective
	Discipline Courses (5)	Discipline Courses (5)
Summer Term	**Professional Development Programs**	
IV	Discipline Oriented Courses (3) Electives (3) OR Internship Program II OR Thesis	Discipline Oriented Courses (3) Electives (3) OR Internship Program II OR Thesis

2.2.1 List of Discipline Courses (SDCs)

Civil Engineering	
1	Surveying I
2	Fluid Mechanics
3	Surveying II
4	Mechanics of solids
5	Analysis of structures
6	Design of Concrete Structures I
7	Design of steel structures I
8	Geotechnical Engineering I
9	Hydraulics & Hydraulic Machines
10	Transportation Engineering I
11	Concrete Technology
12	Design of Concrete Structures II
13	Design of steel structures II
14	Geotechnical Engineering II
15	Water supply& Waste water Engineering
16	Hydrology
17	Transportation Engineering II
Electronics and Communication Engineering	
1	Digital Logic Design
2	Electronic Devices and Circuits
3	Signals and Systems
4	Microprocessor Programming and Interfacing
5	Electronic Circuit Analysis
6	Analog Communications
7	Digital Signal Processing
8	EM Fields & Waves
9	Control systems
10	Linear IC & Applications
11	Digital Communications
12	RF& Microwave Engineering
13	Data Communications
14	Computer Organization and Architecture
15	Satellite Communications
16	Digital Hardware Design
17	Microcontroller Applications
Computer Science Engineering	
1	Digital Logic Design
2	Microprocessor Programming and Interfacing
3	Object Oriented Programming
4	Discrete Structures for Computer science
5	Data Structure and Algorithms
6	Data Communication Systems
7	Programming with Java
8	Operating System
9	Database Management System
10	Computer Networks
11	Computer Graphics
12	Computer Organization and Architecture
13	.NET and C# Programming
14	Programming Languages and Compiler Construction
15	Software Engineering
16	Web Technologies
17	Theory of Computation
Electrical and Electronics Engineering	
1	Digital Logic Design
2	Electronic Devices and Circuits
3	Signals and Systems
4	Microprocessor Programming and Interfacing
5	Electromechanical Energy Conversion
6	Power Systems
7	Digital Signal Processing
8	EM Fields & Waves
9	Control Systems
10	Linear IC & Applications
11	Power Electronics
12	Power Systems Analysis

13	Switch Gear & Protection
14	Computer Organization & Architecture
15	Communication Systems
16	Modern Control Systems
17	Power System Stability & Control
Mechanical Engineering	
1	Machine Drawing
2	Applied Thermodynamics
3	Fluid Mechanics
4	Mechanics of Solids
5	Control Systems
6	Production Techniques
7	Design of Machine Elements
8	IC Engines
9	Hydraulics & Hydraulic Machines
10	Kinematics of Machinery
11	Machine tool & Metrology
12	Heat & Mass Transfer
13	Dynamics of Machinery & Vibrations
14	Computer Aided Design
15	Power Plant Engineering
16	Finite Elemental Analysis
17	Mechatronics

2.2.2 List of Electives (SCOCs)

Civil Engineering	
1	Computer aided Design
2	Advanced Structural Analysis
3	Construction Planning & Management
4	Design and Drawing of Hydraulic Structures
5	Design of bridges
6	Engineering Geology
7	Finite Element Methods in Civil engineering
8	Ground Improvement Techniques
9	Pavement Analysis and Design
10	Prestressed Concrete
11	Estimation costing and Evaluation
12	Soil Dynamics and Machine Foundations
13	Structural Dynamics
Computer Science Engineering	
1	Artificial Intelligence
2	Data Ware Housing and Mining
3	Design Patterns
4	Multimedia Computing
5	Network Programming
6	Network Security
7	Object Oriented Analysis and Design with UML
8	Parallel Computing
9	Real Time Systems
10	Service Oriented Architecture
11	Software Testing Methods
12	SQL and Database Applications
13	Computer Vision
14	Cloud Computing
15	Network Management
16	Internetworking Technology
17	Human Computer Interaction
18	Web Mining
Electronics and Communication Engineering	
1	Telecom Switching Systems and Networks
2	Mobile Telecommunication Networks
3	Wireless Communication Networks
4	Antenna Wave Propagation
5	RADAR Systems
6	Television Engineering
7	Data compression & Encryption
8	Random Signal Processing
9	Analog and Digital VLSI Design
10	Digital Design Using HDLs

11	Mask Design
12	Image Processing
13	Microprocessors & Microcontrollers
Electrical and Electronics Engineering	
1	Advanced Power systems
2	Advanced Power Electronics
3	Digital Control Systems
4	FACTS
5	Fiber Optics and Optoelectronics
6	HVDC Transmission
7	High Voltage Engineering
8	Medical Instrumentation
9	Neural Networks & Fuzzy Logic with Applications
10	Process Control
11	Power Electronics Applications and Devices
12	Power System transients
13	Power Quality
14	Transducers & Measurement Systems
15	Utilization of Electrical Power
Mechanical Engineering	
1	Power Plant Engineering
2	Finite Element Analysis
3	Mechatronics
4	Robotics & Automation
5	Computational Fluid Dynamics
6	Advances in Material science
7	Cryogenics
8	Refrigeration & Air-conditioning
9	Automotive Engineering
10	Unconventional Machining
11	Computer Aided Manufacturing
12	Production Planning & Control
13	Principles of Tribology
14	Quality Assurance and Reliability

PART III
Registration

The structuring of the courses in terms of lecture hours, lab hours, etc is done through the timetable for each semester/term. A student, whether newly admitted or already on rolls, is required to undergo a registration process on the first day of each semester/term to make his/her own timetable for the semester/term. For detail, see section 3.0 of the Academic Regulations.

3.1 Prior Preparation

For certain courses or a group of courses, a specified prior preparation is required. These requirements are described in the following table

To Register in	Prior preparation required to be cleared
Internship Program / Thesis & Seminar	All the Prior Preparatory and Named courses of the student's program
SDC and Named courses of student's own Degree Program	All the Prior Preparatory courses in the semesters and summer terms preceding SDC and Named courses of the student's own Degree Program*
SCOC of student's own Degree Program	After clearing SDC of the student's own Degree Program *
SDC of a Degree other than student's own Degree Program	All the Prior Preparatory & named courses in the semesters preceding SDC of that Degree Program (Other than student's own Degree Program)
SCOC of a Degree other than student's own Degree Program	After clearing SDC of the student's own Degree Program

* SDC and SCOC of student's own degree program may be concurrently registered with prior permission from the concerned authorities.

3.2 Flexibilities

A few of the flexibilities available for the student during registration are mentioned below. The principle of merit, preference of the student and the facilities available at the University generally guide the decision regarding flexibilities.

(i) Choosing electives from across the courses offered is possible, provided the student fulfills the required prerequisites for these courses.

(ii) A student may, at his/her own responsibility, delay or advance taking of the electives in the prescribed program structure.

(iii) A student can overload or under load as per his/her own capability, subject to the regulations. This may shorten/lengthen the duration of the program for him/her.

(iv) To improve the grades, a student can repeat courses at his/her own option, subject to the regulations.

(v) The number of electives required for each program is mentioned in the program structure. Apart from the number of electives specified in the charts, students will be allowed to take a maximum of four additional courses as optional electives. A student can graduate even if he does not get valid grades in these optional elective courses, provided these courses are not required to be repeated necessarily. However, a student will not be permitted to register in a semester only in optional elective courses. For the purpose of eligibility for a degree, a student should get valid grades in at least the prescribed number of electives of his/her program.

'Transfer' is a movement of the student from one goal to another before completion of the first. The structure provides for a transfer from

(a) one branch of B.Tech. program to another branch,

(b) one optional stream to another (IP option to TS and vice versa).

Accordingly the student's semester wise chart has to be changed appropriately. If the student has done a course, with a valid grade, which is not a named course for the new program, it may be allowed to be booked against a future necessity for an elective slot in the new program. Further his entire up to date scholastic record including CGPA is carried over at the point of transfer.

PART - IV

Teaching, Evaluation and Grading

4.1 Teaching

The objective of classroom education is to awaken the curiosity of the student, generate habits of rational thinking in him, gear his mind to face the unfamiliar and train him to be independent. Classroom instructions help the student to organize and correlate facts, comprehend ideas and to use knowledge creatively. For details, see section 4.0 of Academic Regulations.

At the beginning of class work, the Instructor-in-charge/instructor announces to his class/ section through a Course Handout, the necessary information in respect of (i) operations of the course (its pace, coverage and level of treatment); (ii) the frequency/duration of classes, (iii) tentative schedule; textbooks and other reading assignments, home tasks etc; (iv) various components of evaluation, such as quizzes/tests/ examination (announced or unannounced, open-book or closed-book), laboratory exercises, home assignments and their relative weightage, (v) attendance policy; (vi) the broad policy governing the decisions about make-up tests (vii) mid-semester grading; (viii) grading procedure (overall basis, review of border line cases, effect of class average etc.) (ix) Chamber consultation hours and (x) other matters found desirable and relevant.

4.2 Evaluation

Teaching and evaluation form a unity of functions and they operate on the basis of mutual understanding and trust. The different components of evaluation are evenly spread out in the semester and are aimed to draw out responses from the students. For detail, see section 4.0 of Academic Regulations.

4.3 Evaluation Feedback

Just as evaluation is done in a continuous manner, feedback is also made available at regular intervals. Thus the answer scripts are promptly evaluated, shown to the students for any clarification on their performance and returned whenever practicable. The performance of the students is discussed in the class giving as much details as possible including the highest, lowest and average marks. Solutions with the marking scheme are displayed soon after a test.

4.4 Attendance Policy

A student must maintain a minimum of 75% attendance, without which he/she shall be barred from appearing in the examinations. However, the Instructor-in-charge/instructor may consider the genuineness of the case and may recommend to the Dean to condone up to a maximum of 15% below the 75% attendance. The decision of the Dean in all matters of attendance shall be final. It is the responsibility of the individual student to attend all classes, appear for all the prescribed quizzes, tests, etc. and to submit properly and promptly all homework and assignments.

If a student misses the first test due to attendance shortage and is not able to secure 75% attendance till the middle of the semester, he may withdraw from the course. However, if a student, who misses the first test due to low attendance, meets the requirement of minimum attendance by the middle of the semester, he may be given a make-up for the missed first test. If a student does not maintain requisite attendance by the end of the semester, his registration in that particular course may be cancelled and he would be required to re-register (RRA) for the same course. For detail, see section 4.0 of Academic Regulation.

4.5 Make-up Policy

Any student, who misses any component of evaluation for genuine reasons, must immediately approach the Instructor-in-charge/instructor with a request for make-up for the same, stating the reasons. If the Instructor-in-charge is satisfied with the request, a make-up test would be given at the earliest. If a student anticipates a genuine difficulty in meeting the date of a component of evaluation, he should take the Instructor-in-charge/instructor into confidence prior to the event. The decision of the Instructor-in-charge in all matters of make-up shall be final.

4.6 Grading Policy

The evaluation system does not emphasize only on a single examination and numerical marks as absolute indication of the quality of performance of a student. Thus, at the end of a semester, letter grades A, B, C, D and E are awarded to the students based on their overall performance in the course. These grades are relative to the performance of all the students evaluated for that course.

4.6.1 Letter Grades

The list of letter grades, the grade points associated with them and their qualitative meanings are as given below: -

Letter Grade	Qualitative Meaning	Grade Points Attached
A	Excellent	10
B	Good	8
C	Fair	6
D	Poor	4
E	Exposed	2

4.6.2 Non-letter Grades

When a student takes up Thesis/Seminar in place of Internship program option, he gets non-letter grades such as Excellent, Good, Fair or Poor. These non-letter grades have no grade points attached with them.

4.6.3 Reports

At the end of a course, in certain cases, the Instructor-in-charge can report, certain events/ facts in suitable words, in place of letter grades discussed earlier. These reports are not to be construed as grades. The various reports listed below are elaborated in the section 4.18-4.25 of Acadamic Regulations.

1. Incomplete (I)
2. Grade Awaited (GA)
3. Withdrawn (W)
4. Registration Cancelled (RC)
5. Required to Register Again (RRA)
6. Discontinued from the Program (DP) and
7. Not Cleared (NC)

4.6.4 Cumulative Grade Point Average (CGPA)

The Cumulative Grade Point Average (CGPA) is used to describe the overall performance of a student in all courses in which he is awarded letter grades, since his entry into the University up to and including the latest semester/term. It is also used for the declaration of division (if applicable) when the program is completed.

CGPA is the weighted average of the grade points of all the letter grades received by the student from his entry into the degree program of University and is computed as follows:

$$\text{CGPA} = \frac{\Sigma u_i g_i}{\Sigma u_i} = \frac{(u_1 g_1 + u_2 g_2 + u_3 g_3 + \ldots)}{(u_1 + u_2 + u_3 + \ldots.)}$$

where $u_1, u_2, u_3, \ldots\ldots\ldots$ denote units associated with the courses taken by the student and g1,g2,g3 ……. denote grade points of the letter grades awarded in the respective courses. On the other hand, the reports obtained in a course or non-letter grades obtained in Thesis/Seminar will not alter the CGPA, since the same are not accounted for in the CGPA calculation.

When a student repeats a course in which he has already received a grade, as soon as a new grade is obtained, it will replace the earlier one in the calculation of CGPA. It is to be noted that only the latter grade in a course would be taken into account for the calculation of CGPA and not the better of two grades.

4.6.5 Grade Sheet and Transcript

A student's grades, reports, CGPA, etc. at the end of every semester/term will be recorded on a grade sheet, a copy of which will be issued to him. The grade sheet will be withheld when a student has not paid his dues or when there is a case of breach of discipline or unfair means pending against him.

While all grades secured, reports and other pertinent information for a semester are given in a grade sheet, the chronologically organized information from the grade sheets of a student with necessary explanation constitutes his transcript, which is issued at the time he leaves

the University or at an intermediate point on request.

4.7 Minimum Academic Requirements

The educational philosophy of the University interlinks and at the same time distinguishes between the performance of a student in a single course and his overall cumulative performance. Accordingly, the student has to maintain the expected minimum academic requirements for the B.Tech. Program, at the end of each semester. They are as follows:

(i) A student should not have secured more than one 'E' grade in the semester

(ii) A student should have CGPA of at least 4.50.

(iii) A student should have at least cleared with his latest performance, such courses (counted from the point of his entry into the program) as are prescribed for a period that corresponds to two-thirds of the number of semesters spent by him since his entry into the University with reference to his current program. This means that at any stage of reckoning, the student should not have spent more than 50% extra time than what is prescribed for him up to that stage.

4.8 Academic Counseling Committee (ACC):

(i), (ii), (iii) above are the minimum requirements that every student should meet at the end of every semester. Failure to meet even one of these requirements will automatically bring him under the purview of ACC, or designated authority. The ACC would take immediate charge of the student and ask him to follow a specific path so that he can be rehabilitated at the earliest; failing which, the student would be required to leave the University.

Once a student has been placed under the purview of ACC, he should continue to be under its direct guidance until ACC, after being satisfied with his overall progress and performance, declares him to be outside its purview. All decisions of the ACC shall be final.

All the students are advised to take serious note of the consequences of coming under the purview of ACC that are mentioned below:

Warning: A student, who comes under the purview of ACC for the first time due to a performance which is not too bad, is warned to take studies seriously and improve the performance in order to be declared out of ACC in the next semester.

Severe Warning: If a student performs very badly and / or remains under the purview of ACC in the subsequent semester, he would be severely warned and will not be allowed to register with normal academic load in the ensuing semester. ACC will work out a package of courses with reduced load for the ensuing semester, so that the student gets a chance to improve and come out of the purview of ACC.

A student might be put on severe warning directly (without warning) if his performance so warrants

Probation: If the advice and guidance of ACC is not taken seriously by the student, who continues to perform badly, he might be given a last chance and kept on probation during the next semester. During this semester his progress would be closely monitored. If he does not show satisfactory improvement, he may be asked to leave the University.

A student might be put on probation directly (without warning) if his performance so warrants.

Discontinued from the Program: If a student on probation during a semester fails to improve his performance to the satisfaction of the ACC, he would be Discontinued from the Program (DP) and would be asked to leave the University. However, if the student shows a satisfactory improvement, ACC may extend his probation by one more semester, so that he may come out of the purview of the ACC.

It must be noted that any student under the purview of ACC found to be involved in any act of indiscipline or unfair means in examination at any time would be immediately asked to leave the University.

It should therefore be the single minded objective of the student to fulfill the minimum academic requirements stipulated, thus enabling himself to be declared outside the purview of ACC.

4.9 Graduation Requirements

A student is deemed to have fulfilled the requirement of graduation for the B.Tech program when he satisfies the following conditions:-

(i) Has cleared all the courses prescribed for him in his program

(ii) Has obtained a minimum CGPA of 4.5

(iii) Has remained outside the purview of the ACC or been declared outside its purview.

(iv) Has overcome all the consequential stipulations of an NC report; except where there is an NC report in an elective course over and above the prescribed number of elective courses or in a course which has ceased to be a part of his current program as a result of transfer of program.

A student is deemed to have become eligible for the Bachelor's degree if, in addition to the above requirements he has,

i) satisfied all the rules of evaluation.

ii) has no case of indiscipline or unfair means pending against him.

However, in case of a student having outstanding dues against him to be paid to the University, hostel or any other recognized organ of the University, his degree will be withheld until the said dues are cleared.

4.10 Certification

A student who fulfills the graduation criteria will be given a Provisional Certificate before the formal convocation. The Bachelor's degree will be awarded at the formal convocation.

The following classification based on CGPA will be made and mentioned in the graduation certificate of the student.

Distinction	GPA 9.00 or above
First Division	CGPA 7.00 or more but less than 9.00
Second Division	CGPA 4.50 or more but less than 7.00

PART – V

Internship Program

5.1 Objective

The Internship Program (IP) forms an important component of the education at FST. This program is an attempt to bridge the gap between the academic institution and industry by involving the students in an ongoing developmental activity under the direct supervision of experienced Faculty and experts from the Corporate World. The IP method of education and curriculum represents a controlled simulation of real life situations and circumstances. It is adopted by FST to link the educational institution with the real working environment.

Students at FST undertake three Internship Program Courses, at a professional location lasting for about 38 weeks where the students and faculty get involved in working on real-life situations.

Internship Program (IP) is of five and half months duration and is conducted during either of the two semesters of the final year, that also includes a part of the summer term and carries a weightage of 15 units.

The Internship Program requires the students to undergo the rigour of the professional world in form as well as in substance, providing them an opportunity to apply their class-room knowledge to live situations which cannot be simulated in the classroom environment. It differs from the "Practical Training" as well as "Sandwich Schemes" as the entire student education at the Internship Program station is supervised by the FST faculty resident at the station and the program forms a part of the total credit towards student's degree.

Students are advised to take up assignments, of direct interest to the host organization. These assignments involving team-work would be multidisciplinary, time bound, mission-oriented and goal-oriented. Solutions to various problems confronted in the assignment might be open-ended, involving an element of analytical thinking, processing and decision making in the fore of insufficient data, parameters and uncertain situations.

Student-Faculty Interaction

A team of students, attending the Internship program at an organization is assigned a faculty guide at the beginning of the program. The role of the faculty guide during the Internship Program is to aid the student to undertake a meaningful project, provide the necessary academic guidance, and facilitate evaluation with the aid of the company executives while the IP is in progress. In order to make the program meaningful, the faculty stays involved at all stages beginning from the definition of work content to the project completion. He/she plays the role of a mentor and facilitator to ensure smooth conduct of Internship Program. The faculty co-ordinates and interacts with the representatives of the host organization and monitors the student's progress. It is a student's responsibility to regularly report to the faculty and co-operate in the effective monitoring.

Faculty guide interacts with the student's project guide and professional experts regularly to chalk out an effective interaction plan, and later to know about the student's progress in his respective projects and the quality and quantity of work put in by the student. The project guides and experts are invited to the seminars and group discussions in order to involve them more effectively in the Internship Program.

The faculty invites the project guide and experts of the host organization for all intermediate stages of evaluation and also submits the report of the student for his comments and evaluation. For the final round of evaluation, the faculty should also ensure participation of the department head or other senior officials of the organization, apart from the project guide.

5.3 Student-Project Guide Interaction

The project guides from the host organization helps in identifying the assignment suitable for the student. Later they act as technical guides to

the students. Along with the faculty, they evaluate the student on the progress of the work. The project guide's time should not be taken for granted and the students should approach him/her well prepared for specific assistance, guidance or suggestions on the project.

5.4 Discipline and Conduct

Attendance

100% attendance is compulsory for the Internship program. However, if for any genuine reason a student is unable to report to the allotted organization on any day, he/she should obtain a formal permission for leave of absence as per the rules and regulations of the organization. Permission should also be taken from the FST faculty in-charge for the Internship Program.

Conduct and Behaviour

As Interns, the students assume the role of FST ambassadors. The University expects the students to maintain high standards of professional and social conduct in the organization. FST expects the student at all times during the Internship Program, to conform to the rules and regulations of their place of work. It is important to be regular, punctual and obedient at work. During the period of Internship Program, the student shall be subjected to the leave rules of the organization he/she is working for and must ensure strict adherence to the timings of the organization.

Unprofessional behaviour, misconduct, indiscipline, irregularity and unsatisfactory performance at work will lead to the cancellation of registration in the Internship Program. Consequently, a student may lose at least one year of study, besides other form of disciplinary action that FST might deem fit to take.

5.5 Evaluation Criteria

The educational process in the Internship program seeks and focuses attention on many latent attributes that do not surface in the normal classroom situation. Hence, the process of evaluation in these courses is designed with care so that information becomes available continuously. The following attributes are put to test here: intellectual ability, personality, commonsense, professional judgment, responsibility and punctuality, team work, leadership qualities, ability to take initiative, problem-solving and decision making skill, capability to meet deadlines, communicate through oral and written presentations etc.

5.5.1 Project Report

A Project Report is a written presentation of the work done by the students on a given assignment. It is important to bear in mind that even though the project report is submitted only at the end of any given assignment, in reality it is a culmination of continuous efforts on the part of the students.

The project report is judged on the following points: -

1. Knowledge and comprehension of the problem.
2. Ability to analyze and comprehend the subject and aim of study.
3. Logical sequencing, organization and handling of the data in the problem.
4. Findings, observations, concluding remarks in terms of the objectives set earlier and the future scope of the problem.
5. Organization of the report.

5.5.2 Seminar/Viva-Voce

The seminar evaluates the students in terms of the following: -

1. Knowledge of basic concepts and physical principles and the ability to apply them.
2. Additional knowledge acquired.
3. Ability to analyze a given problem or situation.
4. Logical development of the subject.
5. Effective oral communication.
6. Self-reliance, co-operation and moderation.

5.5.3 Group Discussion

The group discussion evaluates the student in terms of the following: -

1. Knowledge and comprehension of the

problem/topic introduced for group discussions.

2. Level of participation.
3. Ability to lead the discussion in the correct direction and co-operate with the fellow members.
4. Ability to re-initiate the topic when the discussion drops due to lack of participation.
5. Ability to suggest new ideas for extending and improving the discussion.
6. Ability to moderate discussions.
7. Ability to create good impression on observers and members.

5.5.4 Quiz

Quiz evaluates the students in terms of the following:-

1. Orientation of the student with the internship organization.
2. Knowledge of basic concepts and physical principles and the ability to apply them.
3. Additional knowledge acquired.
4. Ability to analyze a given problem or situation.
5. Ability to follow logical path in problem-solving efforts.

5.5.5 Evaluation through Observation

During Internship Program, student is evaluated through observations by the faculty and project guide for the following traits: -

1. Regularity and ability to meet deadlines.
2. Sense of responsibility.
3. Initiative, leadership and co-operation.
4. Industry and diligence.
5. Social sense and adaptability to practical situations.

5.5.6 Diary

Further, a student is expected to maintain a diary which is an attempt to cultivate the habit of documentation, enabling the student to develop his own thought process and reasoning abilities. FST faculty would check and sign the diary periodically. Here, the student is tested for the following attributes.

1. Data procurement, calculations and presentation.
2. Thought process.
3. Regularity.

PART VI
Academic Administration and Infrastructure

6.1 Faculty

A team of highly qualified, competent and committed faculty members steers the FST. The University is endowed with teachers drawn from the leading institutions, practicing professionals and academicians to provide high quality of academic delivery. The institution plays a significant role in ensuring quality education through interactive teaching, continuous multiple criteria evaluation and constructive feedback mechanism. The faculty brings their extensive knowledge, professional experience and advanced education to their task at FST.

6.2 Library Facilities

The University has a well-stocked library containing reference materials, magazines and Indian/ International books and journals. The library subscribes to the industry information database to make available large research resources and publications with search facilities to students and faculty. In addition, the library contains directories, industry reports and statistical compilations that provide timely and concise information for project works. Library is open to all students and faculty members and is continuously updated with latest books and journals under the supervision and advice of the library committee.

6.3 Computer Facilities

The University provides the latest hardware and software infrastructure to cater to all the computing needs of the students and faculty. The institution is equipped with powerful servers and multiple terminals with multiple operating systems enabling a client-server environment. The students are guided by well experienced faculty to handle the computer labs. Leased internet facility is available for undertaking research activities.

6.4 Laboratory Facilities

A central workshop with various machine tools and equipments including CNC machine supports hands-on training in various areas of workshop practices.

Laboratories for Physics, Chemistry, Digital Electronics, Microprocessors, Communication, RF & Microwave, Robotics, Digital Signal Processing, Hydraulics & Hydraulic Machines, CAD, Dynamics of Machine & Vibration, Advanced Mechanics of Solids & Kinematics provide facilities for the students of different disciplines to acquire skills for measuring various parameters in science and technology.

6.5 Awards and Medals

Students who successfully complete the program will be awarded relevant Degree by the University, subject to the University regulation.

Students scoring the first rank and second rank on completion of their Program will be awarded Gold and silver medals respectively.

6.6 IUJ Alumni Society

IUJ has established the IUJ Alumni Society (IUJAS). All students are required to seek membership in IUJAS. The provisional membership in the alumni body entitles the students to participate in seminars, workshops, conferences and local chapter activities organized by IUJAS.

6.7 Co-curricular Activities

At FST, emphasis is laid on the need to balance classroom and out-of-classroom life. The University endeavours to build up personal growth and maturity in the students by providing a variety of opportunities for participation and initiation in co-curricular activities. The activities have been intended to support the educational purpose of the University by working to create experimental learning options outside the classroom and encouraging the students to actively participate in the wider educational arena.

Through diverse activities, such as organizing seminars on contemporary issues, guest lectures and other inter-college competitions, the students learn to value collaborative and collective learning. Students are also encouraged to form informal groups and clubs based on their areas of interests, and share information and exchange ideas. Students also organize annual meets, which offer a wide array of opportunities to develop closer interaction with other colleges.

FST encourages student involvement in several co-curricular activities like:

• Group Discussions • Debating
• Elocution • Quizzes • Seminars
• Technical Group • Academic Meets
• Sports Meets • Cultural Meets
• Skits & Plays • Publications/ Magazines

These co-curricular activities help the students to:-

- Improve communication skills
- Develop the right kind of attitude
- Discover and develop one's uniqueness and intelligence
- Enhance leadership qualities and abilities
- Manage stress and work under pressure
- Emerge as a team player
- Refine interpersonal/group skills
- Improve creativity
- Set ambitious targets

6.8 Placements

Utmost importance is given to placement-related activities to ensure that all successful post graduates and graduates receive suitable placements. In this context, the University is uniquely placed to leverage on an industry network, developed over a period of time.

Over the past several years, a strong placement network has been developed with blue-chip companies in the manufacturing, engineering, financial services, information technology, and other sectors. A number of national and multinational companies have recruited the students through campus recruitment. This has been achieved through constant interaction with the industry by way of seminars, internship courses conducted in industries, research projects, and on and off-campus initiatives.

As a part of its placement efforts, placement teams visit potential employers and consultants and apprise them of the level of knowledge and practical application skills acquired by the graduates in their respective areas of specialization. The profiles of the students seeking placement assistance are made available to the prospective employers.

Placement meets and personality development workshops are organized as a part of the placement program. All the students are provided guidance in career planning as they progress to higher levels of the program.

The entire placement exercise is a joint effort between the University and the students. While

the University provides guidance, support, and networking with potential employers, the students have the responsibility to put in the maximum possible efforts to obtain suitable placements.

6.9 Guest Lectures and Seminars

Guest lectures and seminars play an important role in the development process of the students. Eminent academicians and practicing professionals are invited for guest lectures where the students get an opportunity to interact closely with them and understand the practical applications in various industries.

6.10 Students' Council

Students' Council consists of Student Representatives. The council regularly interacts with the faculty members for necessary guidance. Students' Council meets regularly to decide and organize various activities on and off the campus.

6.11 Disciplinary Committee

Students must adhere to the "Campus Rules" copies of which are distributed to the students. Anyone found violating any of these would come under the purview of Disciplinary Committee of the University and would be liable for the punishment awarded by the committee. A few guidelines are mentioned below:

- Ragging is strictly prohibited as per the Government Acts.
- Good behavior, discipline, and respect towards the faculty, staff and fellow- students are expected.
- Cell phones are strictly prohibited in the class rooms, laboratories, library, computer centre, examination halls etc.
- Decent dress code must be maintained within the college campus.
- Utmost care must be taken to avoid any damage while handling the property of the University.
- Adoption of unfair means in tests/ examinations and other components of evaluation are strictly punishable.
- Students should carry their identity cards at all time.
- Smoking, gambling, consumption of alcohol and drugs in the campus/hostel premises are strictly prohibited.
- Gossiping or eating in the classrooms, library, computer centre and labs are not allowed even if the rooms are vacant.
- The students should strive to keep the campus clean and avoid littering.
- A student should not be involved in any case of violence or nuisance within or outside the campus.
- Hostellers should abide by the rules and regulations of the hostel.
- They should necessarily avail the mess.

These guidelines are not exhaustive. Students must adhere to all the rules mentioned in the distributed copies of the "Campus Rules".

6.12 Prohibition of Ragging

Students are prohibited from indulging in any disorderly conduct whether by words spoken or written or by an act with the effect of teasing, treating or handling with rudeness, any other student. Indulging in unruly or indiscipline activities which cause or are likely to cause annoyance, hardship or psychological harm or to raise fear or apprehension thereof in any student, junior or senior, or asking the student to do any act or perform something which such a student will not do in the ordinary course and which has the effect of causing or generating a sense of shame or embarrassment so as to adversely affect the physique or psyche of the student is prohibited. Any student violating the above and thus indulging in any act or ragging, will be severely dealt with.

6.13 Conduct Regulations

Students are expected to act in ways that are consistent with the role and guiding values of the ICFAI University, Jaipur. Students should regulate their own conduct so as not to impede or prejudice

the work of other members. They are entitled to work, learn, study and participate in the social aspects of the institute's life in an environment of safety and respect. It is expected that students

will act with integrity and demonstrate respect for others and adhere to the standards of conduct. Students should refrain themselves from misconduct of any kind.

6.14 Sexual harassment

Sexual harassment of individuals occurring in the place of work or study or in other settings in which they may find themselves in connection with their association with the University is unlawful and will not be tolerated by the University. Further, any retaliation against an individual who has complained about sexual harassment or retaliation against individuals for cooperating with an investigation of a sexual harassment complaint is similarly unacceptable. To achieve this goal, conduct that is described as "Sexual Harassment" in this policy will not be tolerated and a procedure is provided by which inappropriate conduct will be dealt with, if encountered among employees/students.

The University will also take all the appropriate steps necessary to protect individuals from retaliation. Such Steps include:

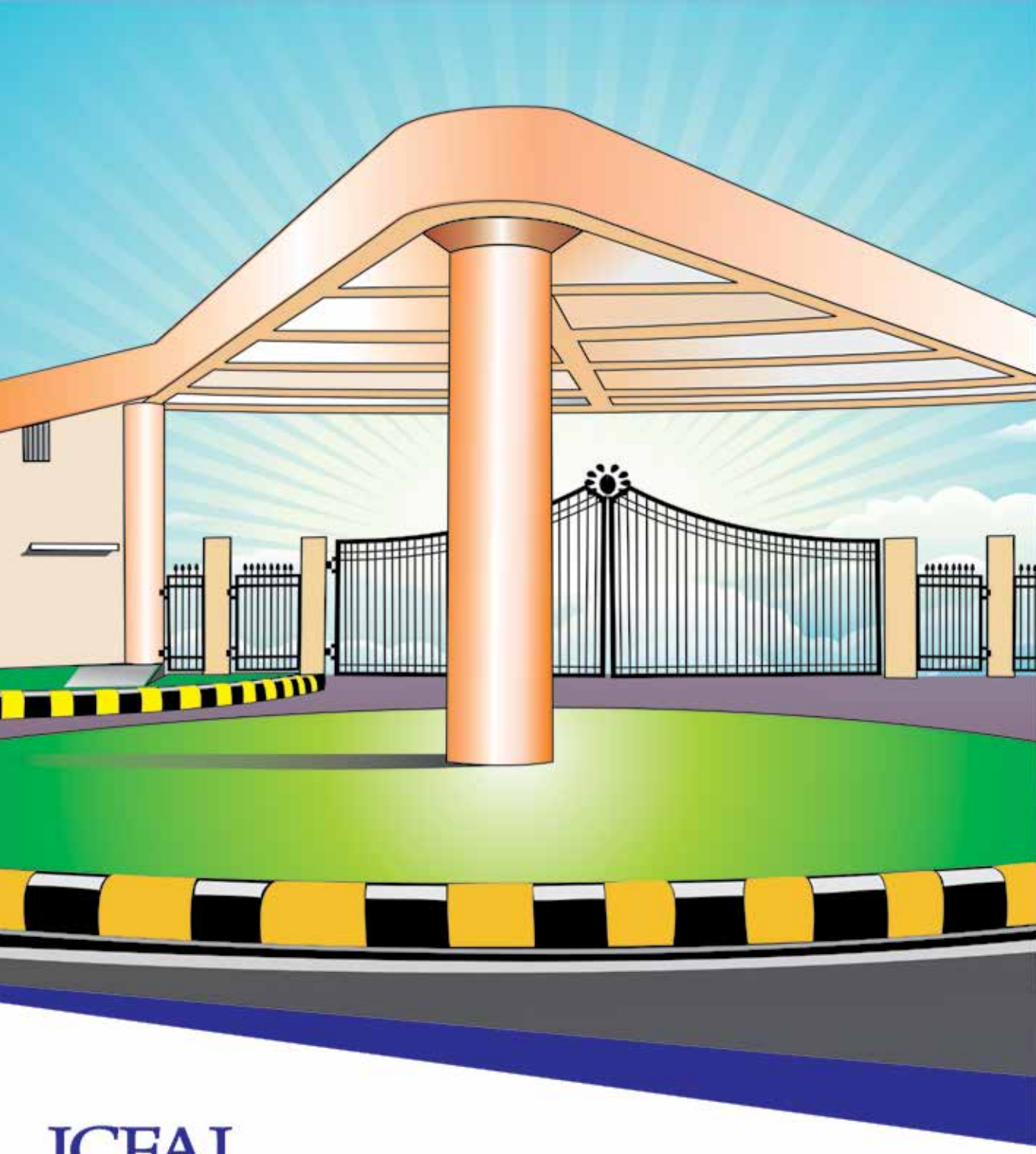
- Action to stop retaliatory behavior.
- Providing required security measures.
- Counseling help to Complainant and Accused.

The University takes allegations of sexual harassment seriously, and will respond promptly to complaints of sexual harassment and where it is determined that such inappropriate conduct has occurred, prompt and appropriate corrective action as is necessary, including disciplinary action, will be taken.

While this policy sets forth the goal of the University of promoting a study or workplace that is free of sexual harassment, the policy is not designed or intended to limit the authority of the University to discipline or take remedial action for conduct which the University deems unacceptable, regardless of whether that conduct satisfies the definition of sexual harassment.

6.15 Communication to Students

The primary mode of communication of the institution with the student is through e-mail. Students are expected to check their e-mail account regularly. Students can access the complete information like registration, detailed course syllabus, fee details, attendance, grades, scholarships and various forms through student zone.



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