Annexure II

All the information of Academic & Administration Rules and Regulations book
July 2013

Academic Rules and Regulations

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      - Five-year Dual-Degree in Computational Natural Sciences
      - Five-year Dual Degree in Computational Linguistics
      - Five-year Dual Degree in Exact Humanities
      - Five-year Dual Degree in Building Science and Engineering

   c. M.Tech Programmes and Academic Regulations
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      - M.Tech VLSI and Computer Engineering
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GENERAL ACADEMIC REGULATIONS FOR UG & PG PROGRAMMES

Outline

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The rules, regulations and procedures given in this document will be applicable to the all academic programmes at the institute.

1 CREDIT SYSTEM

1.1 Introduction

The prominent features of the credit system are the process of continuous evaluation of a student’s performance, the absence of pass or fail on an annual or semester basis and the flexibility to allow the students to progress at a pace suited to individual ability and convenience, subject to the regulations of credit and pre-requisite requirements.

Each course has a certain number of credits assigned to it depending on its lecture, tutorial and laboratory contact hours in a week plus the time expected to be spent by the student outside formal contact hours in a week. Each course is coordinated by a member of the faculty of the course called the course instructor (also called instructor-in-charge). He/she has the full responsibility for conduct of the course, coordinating the work of the other members of the faculty involved in that course, holding the test and awarding the grades. In case of any difficulty the student is expected to approach the course instructor for advise and clarification. Sometimes, more than one member of the faculty can be jointly responsible for the course, in which case they are jointly the course instructors.

A letter grade with a specified number of grade points is awarded in each course for which a student is registered. A student’s performance is measured by

(1) the number of credits that he has earned, and
(2) a minimum number of credits that should be acquired in order to qualify for a degree by the weighted grade point average maintained by him.
1.2 Number of Credits in a Course

For each course L-T-P-C are shown as follows:

L (Lectures): Number of lecture hours per week  
T (Tutorials): Number of tutorial hours per week  
P (Practicals/Laboratory): Number of laboratory hours per week  
C (Credits): Credits for course

Credits reflect the number of hours a student has to work per week inclusive of contact hours. For a course with 4 credits, a student would have to put in about 12 hours of work per week.

For example, L-T-P-C of 3-1-3-4 for a course says that per week the number of lecture hours are 3, tutorial hours are 1, formal laboratory hours are 3, and the total credits are 4.

1.3 Degree Requirements

The degree requirements will be specified in terms of minimum total credits to be earned, as well as minimum credits to be earned in different areas (IT, HSSM, Sciences, others).

Details of these will be given later, and will be important while giving options for electives. These requirements are to make the programme flexible, in which the students can choose courses depending on their differing interests, as long as they satisfy the minimum requirement.

1.4 Audit Courses

An audit course is one in which the student attends classes, does the necessary assignments, takes exams. However, the arrangement is between the instructor and the student. Such a course does not appear in his final grade card.

2 GRADING SYSTEM

2.1 Award of Grades

The grade awarded to a student in a course for which he is registered, will be based on his performance in quizzes, tutorials, laboratory work, and home assignments, etc. as applicable, in addition to one mid-semester exam. and the final semester examination for the course. Typical weightages might be 40% for the final exam, 25% for the mid-semester exam, and suitable weightages for quizzes, home assignments, laboratories, and tutorials. However, the instructor is free to conduct and assign weightages to the exams as well as term papers, open book exams, special laboratory exercises, solving of open problems, in the manner he/she deems fit.  

The distribution of weightage should be decided and announced by the course instructor, in the beginning of the course, so that the students are aware of the evaluation mechanism to be followed in the course.

The grades that can be awarded, and their equivalent numerical points, are listed below.

2.2 Grade and Their Numerical Points

There are eight grades that reflect performance and carry points which are used in computation of grade point average (GPA):

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<thead>
<tr>
<th>Grade Points Description</th>
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<td>A</td>
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The grades that can be awarded, and their equivalent numerical points, are listed below.
A  10  Excellent
A-  9  Very good
B   8  Good
B-  7  Average
C   6  Fair
C-  5  Pass
D   4  Poor
F   2  Fail

The other grades that do not carry points and are not used in computation of GPA are:

P   -   Pass (for pass credit option)
S   -   Satisfactory (for thesis or R&D-apprenticeship course)
X   -   Unsatisfactory (for thesis/project work)
I   -   Incomplete (grade to be assigned later)
W   -   Withdrawal

2.3 Earned Credits

The credits for the courses in which a student has obtained 'D' or a higher grade will be counted as credits earned by him/her. In addition, PCO courses with 'P' grade, and project and thesis courses with 'S' grade, if any, as per the regulation regarding specified maximum, are also counted.

2.4 Description of Grades

The evaluation is generally Norm Referenced, however, the instructor may modify it for very good or very bad overall performance by the class as a whole.

A student is required to repeat all compulsory courses in which he/she obtains an F grade. For the remaining failed courses the student can take the same or substitute courses, as advised by his faculty advisor. In the event of a student getting a GPA below the prescribed minimum, he may be asked to leave the Institute.

The remaining ones will need to be cleared in the next semester/academic year. At that time, he can also take courses of the next higher class, provided the prerequisite conditions are satisfied and the time-table permits this to happen. Thus, F grades may result in increased period of stay for completing degree requirements. Further, the F grades secured in any course stay permanently on the grade card, and they are included in the evaluation of the grade point average for that semester. Once the failed course is cleared, the CGPA does not include the failed course grade.

---- I Grade

This refers to an ‘incomplete’ grade which is required to be converted to a regular grade as described later. This grade is awarded to a student if he has not fulfilled all the requirements for the course on account of extraordinary circumstances, subject to having fulfilled attendance requirements (described later). Student must complete the requirements within stipulated time to convert I to a regular grade.
The 'I' grade shall be converted to a proper grade and will be sent to the Academic Office within 10 days from the date on which all the major tests are over.

---- P/F Grade

These grades are awarded to a PCO course, defined as one which a student may register for on a pass (P)/fail (F) basis; these are not considered in the calculation of SGPA or CGPA. Pass (P) requirement is: attendance in at least 80% of the classes and a minimum grade of ‘C-’. Any deviation from these will result in the fail (F) grade.

---- W Grade

This grade is given when a student withdraws from a course.

---- S Grade

S grade is awarded on the satisfactory completion of the requirements of courses like the thesis work. This will also apply to R&D-apprenticeship courses. (Project work will have normal letter grades, however, a project can be taken under PCO subject to the prescribed maximum.)

---- X Grade

This grade is awarded for unsatisfactory thesis/project work. This will also apply to R&D-apprenticeship courses.

2.5 Evaluation of Performance

The performance of a student will be evaluated in terms of two indices, viz. Semester Grade Point Average (SGPA) which is the Grade Point Average for the Semester and Cumulative Grade Point Average (CGPA) which is the Grade Point Average for all the completed semesters. The Grade Point Average (GPA) will be computed as under:

\[
GPA = \frac{\text{SUM (Credits x Grade Points for each course)}}{\text{SUM (Credits Registered)}}
\]

2.6 Declaration of results

After finalization of the grades, the letter grades awarded will be announced on the departmental notice board. In case any student feels aggrieved, he can contact the teacher concerned within two weeks from the commencement of the semester immediately following the announcement of the results. The student shall have access to his answer paper/s in the end semester examination which may be shown to him by the teacher/s concerned. If the teacher feels that the case is genuine he may re-examine the case and forward a revised grade, if any, to the Academic Section, with justification for the revision.

In the interest of transparency, the teachers have to show answer papers of all exams and quizzes to the students, whether aggrieved or not. They have to make suitable announcements
regarding date and time for showing final exam answer papers. The final exam answer papers should be preserved by the teacher (or by the Academic Section, in case of external faculty or guest faculty) for at least six months after the exam is over.

3 REGISTRATION PROCEDURE

3.1 Pre-registration

Pre-registration for courses to be taken by the students in a particular semester will be done as per a specified schedule before the end of the previous semester. All students are required to complete the pre-registration formalities in consultation with their Faculty Advisers, failing which a fine will have to be paid before registration in the next semester. Further, a student who does not pre-register might not able to get the courses which have a limit on registration.

3.2 Dates and Venue of Registration

The academic record of a student is maintained in terms of the courses for which he/she registers in any semester, and the grades he/she obtains in those courses. Registration for courses is done in the beginning of each semester. The date, time and venue of registration are announced in advance. Since registration is a very important procedural part of the credit system, it is absolutely essential that all students present themselves at the registration desk on the specified day. In case of illness or emergent circumstances of a student on the registration day, he/she must intimate the Dean, Academics, of the same with documentary proof. Registration in absentia may be allowed only in rare cases, at the discretion of the Dean; however, the student’s nominee cannot register for courses but will only be allowed to complete other formalities.

3.3 Clearance of Dues

At the time of admission, the student must pay the fees and make other specified payments before he/she can be registered for courses. In subsequent semesters, the student should obtain two 'no dues certificates' before he/she can be registered for the courses of a semester: one from the Hostel Warden and the other from the Institute Accounts Officer. These should be produced at the time of registration. The 'no dues certificate' is given by the Warden when the student has no mess arrears in the previous semester and has paid the mess advance for the current semester. The second clearance is for Institute dues which should be paid at the Accounts Desk in the registration hall by cash, or by bank drafts (bank cheques are not accepted). The Institute dues will include the current semester’s tuition fees, other dues as well as the previous semester's arrears, if any. The drafts should be drawn in the name of “IIIT Hyderabad” payable at Hyderabad. For mess dues, the draft should be drawn in the name of “IIIT Students Mess A/c” payable at Hyderabad.

3.4 Advice on Courses

All students have to consult their Faculty Advisers and get their registration slips signed by them. One Faculty Adviser is normally appointed for a batch of students in a particular discipline who will chalk out the complete programme of study of each student and advise on the courses to be taken by a student. Special provisions exist for academically weak students.

3.5 Lower and Upper Limits for Credits Registered
A student should register for a minimum of 16 credits in a semester if s/he has at least that many credits to be completed for the degree s/he is in. No student should register for more than 27 credits in a semester excluding the PT credits. A student registering for more than 24 credits must seek Institute's permission to do so. If a student registers for less than 16 credits (excluding the PT credits) he will have to change his status to that of a part-time student.

**Rules for Part Time UG Students**

A UG student can register for minimum of 4 credits and maximum of 8 credits in a semester beyond 4 years if he do not complete his graduate requirements in 4 years.

**Rules for Part Time PG Students**

A PG student can register for minimum of 4 credits and maximum of 8 credits in a semester. However, student can take up to 12 credits subject to the approval of PG Committee.

### 3.6 Minimum Student Registration in a Course

A course will normally run only if there is a minimum registration of 8 students. This requirement applies to Summer Courses also.

### 3.7 Late Registration

For reasons beyond his control, if a student is not able to appear at the registration desk or send an authorized representative with medical certificate, he/she may apply to the Dean for late registration. The Dean will consider and may approve late registration in genuine cases on payment of an extra fee of Rs. 1000. This extra fee will not be waived, whatever be the reason for the late registration. Late registration would end after two weeks of the start of the semester.

### 3.8 Addition, Deletion and Withdrawal from Courses:

A student would have the option to add or delete courses from his/her registration list on the add/drop day. The Academic Section will then issue a final registration sheet, which becomes the official record of students registered in a course.

A student wishing to withdraw from a course, should apply on the prescribed form within seven weeks of the start of the course. A withdrawal grade (W) may be awarded in such cases. A student may also apply for changing number of credits in a project course within the first four weeks of the semester.

### 4 MISCELLANEOUS REGULATIONS AND PROCEDURES

#### 4.1 Attendance Requirement:

a. 100 % Attendance is compulsory in all courses. Inclusion of lab sessions and tutorials for attendance is faculty’s discretion.

   a.1 Required minimum attendance: \( \geq 85\% \) (Because a student miss few classes due to emergency and other contingencies)

   a.2 In case the attendance falls short, the following are the penalties:
1. For attendance between 75% to 85% [75-85%] Grade given by the instructor to be reduced by 1 (For example, B becomes B-, B- becomes C) The reduced grade bottoms out at D.

2. For attendance between 65% to 75% [65-75%] Grade given by the instructor to be reduced by 2 (For example, B becomes C, B- becomes C-) The reduced grade bottoms out at D.

3. For attendance between 0 to 65% [0-65] Grade to be changed to 'F'

**Detailed information on Attendance Policy is given in page no 80**

b) In order to maintain the attendance record of a particular course, a roll call may be taken in every scheduled lecture, tutorial and practical class (for the purposes of attendance, every scheduled practical class will count as one unit irrespective of the number of contact hours).

c) The instructor-in-charge will consolidate the attendance record for the course (lectures, tutorials and practicals together as applicable) from the beginning of the semester up to the mid-sem exam and from the mid-sem exam to the final exam. The institute may send this information in writing to the concerned students and their parents.

**4.2 Semester Withdrawal**

In case, the valid period of absence (on medical grounds) is more than 18 working days during the semester, the student may apply for withdrawal from the entire semester. Each application for semester withdrawal will be examined by the Dean and depending on the merit of the case an appropriate recommendation will be made to the Chairman Academic Council. No partial withdrawal from courses registered in a semester will be considered.

**4.3 Absence during the Semester and Award of 'W' Grade**

A student who has been absent due to illness for a short period, up to a maximum of two weeks, should approach the Instructor or the Course Coordinator for a make-up test or assignment immediately on returning to the class. This request should be supported by a medical certificate from the Institute approved Medical Officer. The certificate issued by some other registered medical practitioner (with the registration number shown explicitly on the certificate) will also be acceptable in those cases where the student has valid reasons for absence from the Institute hostel.

**4.4 Absence during the Mid Semester exam and final examination**

In case of absence on medical grounds or other extraordinary ground before or during the Major Test period (typically the final semester exam), 'I' grade application may be made by a student on the prescribed form to the Dean (Academics) within 2 days after the exam through the regular medical leave application process.

**On medical grounds**
1. Students who are absent on medical ground have to submit a certificate from the panel doctor of the Institute. On verification with the doctor, a makeup exam shall be conducted on a pre-announced date.

2. If a student is ill while he is out of station, the student has to submit a medical certificate from an appropriate hospital. The conduct of makeup exam will be decided on case by case, after verifying the genuineness of the certificate.

3. If the Dean accepts the application of the student for taking a make up exam of the end-semester examination, this would be informed to the course instructor to conduct a makeup examination. The make up exam should be completed within two weeks of start of next semester.

4. No makeup exam is conducted for a missed mid-semester exam. The instructor is free to prorate the student based on his performance in other exams. The discretion rests with the instructor.

**On extraordinary circumstances**

The 'I' grade shall be converted to a proper grade and will be sent to the Academic Office within 10 days from the date on which all the major tests are over.

The Dean may relax the above in special situations, which arise due to extraordinary circumstances. The period for conversion of 'I' grade can be extended to the first week of the next semester, with the approval of Dean on the recommendations of the Instructor-in-charge.

**4.5 Normal and Maximum Duration of Stay at the Institute**

The normal duration and the maximum duration for the completion of the requirements for the various programmes are given in the regulations relating to that programme.

If a student is granted withdrawal for one or more semesters on medical grounds, this will count towards the maximum duration of stay at the Institute.

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B.Tech in Computer Science and Engineering (4 years)
Curriculum and Graduation Requirements [Subject to Changes]
May 2012

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<td>IV</td>
<td>II</td>
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<td>II</td>
<td>Pr</td>
<td>CS</td>
<td>Elective (CS/Free)</td>
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</table>

(*) Flexi-core course  
(^) Preferred semester - can be taken in III year in Elective Slot  
[+] Takes SC/MA/HS depending on the area of course taken

**Note:** 4 year B.Tech Students who are interested for B.Tech Honours programme have to take the following EXTRA 2 projects in III(I) and IV(II).

<table>
<thead>
<tr>
<th>Semester</th>
<th>Term</th>
<th>Pr</th>
<th>Subject Area</th>
<th>Course Code</th>
<th>Credits</th>
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<td>0-0-8-4</td>
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<tr>
<td>IV</td>
<td>II</td>
<td>Pr</td>
<td>CS</td>
<td>Honours Project II</td>
<td>0-0-8-4</td>
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</tbody>
</table>

**Note:** Dual Degree Students have to take the following EXTRA projects / courses during their III and IV years. BTP is not required.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Term</th>
<th>Pr</th>
<th>Subject Area</th>
<th>Course Code</th>
<th>Credits</th>
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<tr>
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<td>Pr</td>
<td>CS</td>
<td>Honours Project I</td>
<td>0-0-8-4</td>
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<td>II</td>
<td>Pr</td>
<td>CS</td>
<td>Honours Project I</td>
<td>0-0-8-4</td>
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<td>II</td>
<td>Pr</td>
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<td>Research Stream Course</td>
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<tr>
<td>IV</td>
<td>I</td>
<td>Pr</td>
<td>CS</td>
<td>Honours Project III</td>
<td>0-0-8-4</td>
</tr>
</tbody>
</table>
1.1 Bouquet Courses

Bouquet courses for Computer Science cater to developing breadth in computer science in Foundations and Systems Area. Some of these courses are also Research Stream Courses. A student must take at least three courses from Foundations and Systems Bouquet Courses.

### Foundation Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Semester Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE411</td>
<td>Complexity and Advanced Algorithms</td>
<td>Spring</td>
</tr>
<tr>
<td>CSE471</td>
<td>Statistical Methods in AI</td>
<td>Monsoon</td>
</tr>
<tr>
<td>CSE415</td>
<td>Principles of Programming Languages</td>
<td>Monsoon</td>
</tr>
<tr>
<td>CSE481</td>
<td>Optimization Methods</td>
<td>Spring</td>
</tr>
<tr>
<td>CSE418</td>
<td>Principles of Information Security</td>
<td>Spring</td>
</tr>
</tbody>
</table>

### Systems Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Semester Offered</th>
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</thead>
<tbody>
<tr>
<td>CSE431</td>
<td>Distributed Systems</td>
<td>Monsoon</td>
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<tr>
<td>CSE441</td>
<td>Database Systems</td>
<td>Spring</td>
</tr>
<tr>
<td>CSE435</td>
<td>Advanced Computer Networks</td>
<td>Spring</td>
</tr>
<tr>
<td>CSE419</td>
<td>Compilers</td>
<td>Monsoon</td>
</tr>
<tr>
<td>CSE461</td>
<td>Software Engineering</td>
<td>Spring</td>
</tr>
</tbody>
</table>

1.2 Stream Courses

### Data Engineering

- CSE441 Database Systems
- CSE445 Data Warehousing and Data Mining
- CSE541 Advances in Database Systems
- CSE545 Advances in Data Mining

### Language Technologies

- CSE472 Natural Language Processing
- CSE572 Natural Language Processing II
- CSE573 Natural Language Applications
- CLG431 Natural Language Dialog Systems
- CSE474 Information Retrieval and Extraction

### Robotics

- ECE452 Intro to Robotics: Machines & Control
- ECE485 Embedded Robotics
- CSE481 Mobile Robotics
- CSE482 Multi Agent Systems
- CSE485 Introduction to Cognitive Science

### Security, Theory and Algorithms

- CSE418 Computational Geometry
CSE415 Cryptography and Network Security
CSE811 Topics in Information Security
CSE538 Systems and Network Security

**Visual Information Technology**
CSE251 Graphics
CSE471 Statistical Methods in AI
CSE478 Image Processing
CSE577 Machine Learning
CSE578 Computer Vision

**VLSI & Embedded Systems**
ECE481 Analog & Mixed Signal Design
ECE468 Modeling and Simulation of High-Speed VLSI Systems
ECE485 Embedded Robotics

... other streams can be added.

**1.3 CSE Program Notes**

(i) The Data Structures, Algorithms and Formal Methods courses will form the basic core for students to take Bouquet courses.

(ii) The Digital Logic and Processors, Computer System Organization and Operating Systems will form the systems core. Data Management and Applications is a two credit course covering designing databases for applications. Network programming and use is covered in the IT workshop course. Networking a two credit course covering basic concepts of Computer Networks.

(iii) All Bouquet courses are 400 level courses.

**2 Graduation Requirements for B.Tech in CSE**

In order to graduate with B.Tech in Computer Science and Engineering, a student must successfully complete 173 credits with minimum CGPA of 5.5 and meet the following requirements.

(i) Must successfully complete the Institute Core.
(ii) Must successfully complete at least three Foundation Bouquet Courses
(iii) Must successfully complete at least three Systems Bouquet Courses
(iv) Must successfully complete at least one Maths Elective course in years III & IV
(v) Must successfully complete at least one Engineering Elective course in years III & IV
(vi) Must successfully complete at least two Science Elective courses in years III & IV
(vii) Must successfully complete at least three Humanities Elective courses in years III&IV
(viii) Must successfully complete at least two CS elective courses in years III & IV
(ix) Must successfully complete at least 10 credits of Free/CS elective courses in years III & IV (these can be used to do courses of level 3xx or above in any area: CS/ECE/Science/ Maths/ Humanities/Engg).
(x) Must successfully complete 4 credits from Physical Activity (Non academic credit – Excluding 173 – to be completed in first 2 years)
3 Graduation Requirements for B.Tech (Honours) in CSE

In order to graduate with B.Tech Honours in Computer Science and Engineering, a student must successfully complete 181 credits, meet requirements of above mentioned in point 2; and

(i) Must successfully complete the FOUR 4 credit projects (Honours and BTP) in semesters V to VIII and obtain a GPA greater than 8 in these 4 projects.

(ii) Must successfully complete at least three electives in the chosen honours stream (These courses will count towards Bouquet courses and CS/Free Electives also).

4 Graduation Requirements for Dual Degree (B.Tech (Honours) + MS by Research) in CSE

In order to graduate with B.Tech Honours and MS by Research in Computer Science and Engineering, a student must successfully complete 189 course credits and 24 Thesis credits, meet requirements of above mentioned in point 2 with CGPA of 7.00; and

(i) Must successfully complete the FOUR 4 credit projects (Honours) in semesters V to VIII and obtain a GPA greater than 8 in these 4 projects.

(ii) Must successfully complete two 4 credit research stream courses in semesters VI and VII.

(iii) Must successfully complete at least three electives in the chosen honours stream (These courses will count towards Bouquet courses and CS/Free Electives also).
<table>
<thead>
<tr>
<th>Year</th>
<th>Semester</th>
<th>CD</th>
<th>AD</th>
<th>CNO</th>
<th>CName</th>
<th>Credits</th>
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<tbody>
<tr>
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<td>I</td>
<td>In</td>
<td>MA</td>
<td>IMA101</td>
<td>Mathematics I</td>
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<tr>
<td>I</td>
<td>I</td>
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<td>CS</td>
<td>ICS101</td>
<td>Computer Programming</td>
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<tr>
<td>I</td>
<td>I</td>
<td>In</td>
<td>EC</td>
<td>IEC101</td>
<td>Digital Logic and Processors</td>
<td>3-1-3-5</td>
</tr>
<tr>
<td>I</td>
<td>I</td>
<td>In</td>
<td>EC</td>
<td>IEC102</td>
<td>Electrical Science I (H2)</td>
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<td>I</td>
<td>I</td>
<td>In</td>
<td>CS</td>
<td>ICS102</td>
<td>IT Workshop I</td>
<td>2-0-3-3</td>
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</table>

| I    | II       | In | MA | IMA102 | Mathematics II                      | 3-1-0-4   |
| I    | II       | In | CS | ICS103 | Data Structures                     | 3-1-3-5   |
| I    | II       | In | CS | ICS104 | Computer System Organization       | 3-1-0-4   |
| I    | II       | In | EC | IEC103 | Basic Electronic Circuits           | 3-1-3-5   |
| I    | II       | In | EC | IEC104 | Electronics Workshop I (H2)         | 1-0-4-2   |
| I    | II       | In | HS | IHS142/132 | English 2/HSS Skills 2     | 2-0-0-2   |
| Total|          |    |    |        |                                     | 15-4-10-22|
| Total In-class hours: 19 |

| II   | I       | Pr | MA | ECE230 | Probability & Random Processes      | 3-1-0-4   |
| II   | I       | Pr | EC | ECE205 | Linear Electronic Circuits          | 3-1-3-5   |
| II   | I       | Pr | EC | ECE241 | Signals & Systems                   | 3-1-0-4   |
| II   | I       | Pr | EC | ECE260 | Electrical Science II (H1)          | 3-1-0-2   |
| II   | I       | Pr | EC | ECE225 | Embedded Hardware Design            | 3-0-3-4   |
| II   | I       | Pr | SC | ISC201 | Science I                           | 3-1-0-4   |
| Total|          |    |    |        |                                     | 18-5-6-23 |
| Total In-class hours: 23 |

<p>| II   | II      | In | EG | IEG201 | Engineering Systems                 | 3-1-0-4   |
| II   | II      | Pr | EC | ECE335 | Communication Theory I              | 3-1-0-4   |
| II   | II      | Pr | EC | ECE341 | Digital Signal Processing           | 3-1-0-4   |
| II   | II      | Pr | EC | ECE339 | ECE Lab                             | 0-0-3-1   |
| II   | II      | Pr | EC | ECE361 | Intro to VLSI *                     | 3-1-0-4   |
| II   | II      | Pr | EC | ECE291 | Electronics Workshop II             | 1-0-4-4   |
| II   | II      | In | HS | IHS201 | Introduction to Humanities          | 3-0-3-4   |
| II   | II      | In | HS | IHS152 | Human Values II                     | 0-2-0-2   |
| Total|          |    |    |        |                                     | 16-6-10-27|
| Total In-class hours: 22 |</p>
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<th>CName</th>
<th>Credits</th>
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<tr>
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<td></td>
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</tr>
</tbody>
</table>

(*) Flexi-core course  
(^) Preferred semester - can be taken in III year in Elective Slot  
[+] Takes SC/MA/HS depending on the area of course taken  

**Note**: 4 year B.Tech Students who are interested for B.Tech Honours programme have to take the following EXTRA 2 projects in III(I) and IV(II).

<table>
<thead>
<tr>
<th>Year</th>
<th>Semester</th>
<th>CD</th>
<th>AD</th>
<th>CNO</th>
<th>CName</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td>I</td>
<td>Pr</td>
<td>EC</td>
<td></td>
<td>Honours Project I</td>
<td>0-0-8-4</td>
</tr>
<tr>
<td>IV</td>
<td>II</td>
<td>Pr</td>
<td>EC</td>
<td></td>
<td>Honours Project II</td>
<td>0-0-8-4</td>
</tr>
</tbody>
</table>
Note: Dual Degree Students have to take the following EXTRA projects / courses during their III and IV years. BTP is not required.

<table>
<thead>
<tr>
<th>Year</th>
<th>Semester</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
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<td>Pr</td>
<td>EC</td>
</tr>
<tr>
<td>III</td>
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<td>I</td>
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<td>EC</td>
</tr>
<tr>
<td>IV</td>
<td>II</td>
<td>Pr</td>
<td>EC</td>
</tr>
</tbody>
</table>

1.1 Stream Areas and courses

**Signal Processing Stream**
- **Level 1**: Time Frequency Analysis / Network Theory + Digital Image Processing (DIP) / Speech Signal Processing (SSP)
- **Level 2**: Pattern Recognition (PR), Computer Vision, Medical Image Processing, Advanced Signal and Image Processing, Artificial Neural Networks (ANN), Speech Technology, Speech systems, etc

**Communication Stream**
- **Level 1**: Error Correcting Codes / Information Theory and Coding + Communication Theory 2 / Wireless Communication
- **Level 2**: Space Time Coding, Topics in Wireless Communication, Radar Systems, Antennas and Propagation, Signal Detection and Estimation Theory, Computational Electromagnetics, etc

**VLSI & Embedded System Stream**
- **Level 1**: Analog & mixed signal design + VLSI Architectures / Device Physics / Network Theory / Digital Design with HDL
- **Level 2**: CMOS RF IC Design, Advanced VLSI Circuits and Systems, Topics in Embedded Systems, Design for Testability, Modern Computer Architecture, ANN, Photonics, Fiber Optics, etc

**Robotics Stream**
- **Level 1**: Linear Control Systems / Introduction to Robotics / Mobile Robotics + DIP
- **Level 2**: Linear Control Systems / Introduction to Robotics + Mobile Robotics
Note:

In BTech (ECE) programme, 7 ECE electives are to be chosen from 4 streams listed above subject to the following conditions:

1. A minimum of 1 elective, at level 1, has to be taken from every stream. (4 electives)
2. An additional elective has to chosen from any one stream at level 1. Recommended combinations are given.
3. Remaining 2 electives can be chosen from any stream from level 2, provided the pre-requisites have been satisfied.
4. Up to 4 credits can be earned via Independent study or Projects. These can be counted only for Free or Level 2 ECE electives with the approval of Programme Coordinator

For dual degree students, all the electives may be recommended to be from a single stream to satisfy conditions 2 and 3. Consult your supervisor.

2. Graduate Requirements for 4-year BTech in ECE degree are:

In order to graduate with 4-year B.Tech in Electronics and Communication Engineering, a student must successfully complete 175 credits with minimum CGPA of 5.5 and meet the following requirements.

(i) Must successfully complete the Institute Core.
(ii) Must successfully complete ECE core course requirements.
(iii) Must successfully complete 7 ECE electives as per given prescriptions in 1.1 above.
(iv) Must successfully complete two electives from Maths or Science courses in years III & IV
(v) Must successfully complete at least one Engineering Elective course in years III & IV
(vi) Must successfully complete at least three Humanities Elective courses in year IV
(vii) Must successfully complete at least two (of the 7) ECE elective courses in year IV
(viii) Must successfully complete 4 credits in any of the streams (HSS, Maths, Engineering, CSE/ECE)
(ix) Must successfully complete 4 credits from Physical Activity (Non academic credit – Excluding 175 – to be completed in first 2 years)

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<th>Institute Core + Programme Core</th>
<th>61+50</th>
<th>111</th>
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<td>ECE Electives (7) (5 L1+ 2 L2)</td>
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<td>2*4 = 08</td>
<td>147</td>
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<td>Humanities Elective (3)</td>
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<td>Engineering Elective (1)</td>
<td>1*4 = 04</td>
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<tr>
<td>BTP 1 &amp; 2</td>
<td>2*4 = 08</td>
<td>171</td>
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<tr>
<td>Free Elective (1)</td>
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<td>175</td>
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</table>
3. Graduation Requirements for 4-year B.Tech (Honours) in ECE are:

In order to graduate with B.Tech Honours in Electronics and Communication Engineering, a student must successfully complete 183 credits, meet requirements of above mentioned in point 2; and

(i) Must successfully complete the FOUR 4 credit projects (Honours and BTP) in semesters V to VIII and obtain a GPA greater than 8 in these 4 projects.

(ii) Must successfully complete the level 2 courses from one stream.

4. Graduation Requirements for Dual Degree (B.Tech (Honours) + MS by Research) in ECE are:

In order to graduate with B.Tech Honours in Electronics and Communication Engineering, a student must successfully complete 191 course credits and 24 Thesis credits, meet requirements of above mentioned in point 2 with CGPA of 7.00; and

i) Must successfully complete the FOUR 4 credit projects (Honours) in semesters V to VIII and obtain a GPA greater than 8 in these 4 projects.

ii) Must successfully complete the level 2 courses from one stream and successfully complete two 4 credit research stream courses in semesters VI and VII.

___________________________________________

Five year Dual degree program in CSE/ECE
(leading to B.Tech in CSE / ECE and MS by Research in CSE / ECE)

The curricula upto 4 years is mostly same as B.Tech (CSE) and B.Tech (ECE) four year Honours programme. Following are the additional requirements for MS by Research Programme.

Students have to spend an extra year for completing the thesis and other requirements to get the Masters degree.

There is no course plan for the fifth year. The requirements can be summarized as:

Credit Requirements:

1. 16 credits worth of extra work, over the normal requirements for the B.Tech degree, during the first four years. The distribution of this could be 4 credits each of project work during the 5th and 6th semesters, 1 course each extra during the 7th and 8th semesters.

2. 24-credits worth of MS thesis work at 12 credits in each semester

Breadth/Depth Requirements:
A student should demonstrate the knowledge of the basic courses in at least 4 of the stream areas and must take an advanced course in a minimum of 3 stream areas. The requirements should be completed by the end of the fourth year of study.

**Academic Performance:**

A student should complete the requirements with a minimum CGPA of 7.0 for the 5 years to receive the MS degree.

**Residency Requirements:**

Minimum of 10 semesters, maximum of 12 semesters.

---

**Five-year Dual-Degree in Computational Natural Sciences (leading to B.Tech in Computer Science and MS by Research in Computational Natural Science)**

**Curriculum and Graduation Requirements [Subject to Changes]**

<table>
<thead>
<tr>
<th>Year</th>
<th>Semester</th>
<th>CD</th>
<th>AD</th>
<th>CNO</th>
<th>CName</th>
<th>L-T-P-Credits</th>
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<td>MA</td>
<td>IMA 101</td>
<td>Mathematics I</td>
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<td>In</td>
<td>CS</td>
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<td>Computer Programming</td>
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<td>I</td>
<td>I</td>
<td>In</td>
<td>EC</td>
<td>IEC101</td>
<td>Digital Logic Processors</td>
<td>3-1-3-5</td>
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<td>I</td>
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<td>In</td>
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<td>ICS102</td>
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<td>I</td>
<td>In</td>
<td>HS</td>
<td>IHS151</td>
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<td>0-2-0-2</td>
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Total 16-6-9-25

Total In-class hours: 22

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Total 19-4-6-26

Total In-class hours: 23

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<td>II</td>
<td>Pr</td>
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Total 15-5-8-24
Total In-class hours: 20

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<th>CS</th>
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Total 12-4-8-20
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<th>12 +12 Credits</th>
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**CNS Electives:**

- Introduction to Bioinformatics
- Advanced Bioinformatics
- Quantum Mechanics III
- Advanced Biology
- Science of Quantum Computing
- Complex Systems: Dynamics
- Research Proj. In Compu. Biology
- Physics of Advanced Materials
- Nanotech. & sci of nanobio systems
- Systems Biology

**Graduate Requirements**

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Thesis Credits – Typically in 5th year 12*2=24 214
In order to graduate with B.Tech (Honours) in Computer Science and MS by Research in Computational Natural Science, a student must successfully complete 190 course credits and 24 Thesis credits, with minimum CGPA of 7.00 and meet the following requirements.

1) Meet the requirements as given in the above table and

2) Students are required to complete 4 PT Credits which will be counted towards extra-curricular credits (not part of credit requirements mentioned above).

3) Must successfully complete the four 4 credit Honours Projects in semesters V, VI, VII & VIII and obtain a GPA greater than 8 in these projects.

---

### Five-year Dual Degree in Computational Linguistics (leading to B.Tech in Computer Science and MS by Research in Computational Linguistics)

#### Curriculum and Graduation Requirements [Subject to Changes]

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<td>Digital Logic and Processors</td>
<td>3-1-3-5</td>
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**Total In-Class Hours per week - 26**

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**Total In-Class Hours per week - 27**

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**Total In-Class Hours per week - 23**

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**Total In-Class Hours per week - 22**

**Total In-Class Hours per week - 21**

**Total In-Class Hours per week - 20**

**Total In-Class Hours per week - 19**

**Total In-Class Hours per week - 18**

**Total In-Class Hours per week - 17**

**Total In-Class Hours per week - 16**
III. Electives

III.1 CL-Electives (for Streams):

(Although some courses together may provide an in-depth knowledge for a chosen stream, however, the students will be free to choose any of the courses from the list provided below).

Advanced Syntax
Grammar Formalisms (LTAG, LFG, HPSG etc)
Indian Grammatical Tradition/Information Dynamics in Language
Natural Language Semantics
Cognitive Science
Ontology
Natural Language Dialog Systems
Phonetics and Phonology
Linguistics Data 1
Linguistics Data 2

III.2 CS Electives

Any CS elective
CS Core courses which can be taken as CS elective

(*) Flexi-core course
(^) Preferred semester - can be taken in III year in Elective Slot
[+] Takes SC/MA/HS depending on the area of course taken
Digital Signal Analysis and Applications

**IV. CL-Related CS Courses**

Artificial Intelligence  
Statistical Methods in AI

**V. Recommended Bouquet Courses for CL**

**V.1 Foundation Courses**

CSE411 - Complexity and Advanced Algorithms  
CSE415 - Principles of Programming Languages

**V.2 Systems Courses**

CSE431 - Distributed Systems  
CSE441 - Database Systems  
CSE419 - Compilers (More Advanced than current)  
CSE461 - Software Engineering

**VI. Total Credit requirements**

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In order to graduate with B.Tech Honours in Computer Science and MS by Research in Computational Linguistics, a student must successfully complete 190 course credits and 24 Thesis credits, with minimum CGPA of 7.00 and meet the following requirements.

1) Meet the requirements as given in the above table VI and
2) Students are required to complete 4 PT Credits which will be counted towards extra-curricular credits (not part of credit requirements mentioned above).

3) Must successfully complete the TWO 4 credit Honours Projects in semesters VII & VIII and obtain a GPA greater than 8 in these 2 projects.

---

**Five-Year Dual Degree in Exact Humanities (Leading to B.Tech in Computer Science and MS by Research in Exact Humanities)**

**Curriculum and Graduation Requirements [Subject to Changes]**

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Total 16-4-6-24

Total In-Class Hours per Week – 26

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Total 19-2-0-24

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Total 19-2-0-24

Total In-Class Hours per Week – 21
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<td>Confluence Projects-Honours-3</td>
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Total In-Class Hours per Week – 17

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Total In-Class Hours per Week – 0

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Total In-Class Hours per Week – 0

**Exact Humanities Sub-Streams: Choice of 4 Electives from Following**

**Cultural Informatics Stream:**

1. Content Engineering*
2. Indian Aesthetics*
3. Theory of Cinema, Sports and Arts;
4. Narrative: Ramayana; Mahabharata and Stories

**Ontology Stream:**

1. Computational Appraisal of Indic Traditions
2. Generative Ontology and Applications
3. Indic Philosophical Systems
4. Phenomenology

**Development Stream:**

1. Search for a Human Society
2. Indian Constitution, Polity and Governance*
3. Decentralized Development and Social Wellbeing*
4. Social Choice Theory: Law and Environment

**CS Bouquet Core Courses: Choice of Four from Foundation and System Courses**

**CS Elective Courses: Choice of Four Electives from Following:**

**Data Engineering**

CSE441 Database Systems
CSE445 Data Warehousing and Data Mining

**Language Technologies**

CSE472 Natural Language Processing
CSE572 Natural Language Processing II
CLG431 Natural Language Dialog Systems
CSE474 Information Retrieval and Extraction

Robotics
CSE482 Multi Agent Systems
CSE485 Introduction to Cognitive Science

Security, Theory and Algorithms
CSE811 Topics in Information Security
CSE538 Systems and Network Security

Visual Information Technology
CSE251 Graphics
CSE478 Digital Image Processing

**Science Elective Courses:** Choice of One Elective from Science Courses

**Summary**

<table>
<thead>
<tr>
<th>Area</th>
<th>Core</th>
<th>Elective</th>
<th>Total</th>
<th>Percentage</th>
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<td>32</td>
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<tr>
<td>Exact Humanities</td>
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<td>32</td>
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<td>Programme Core</td>
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In order to graduate with B.Tech Honours in Computer Science and MS by Research in Exact Humanities, a student must successfully complete 192 course credits and 24 Thesis credits, with minimum CGPA of 7.00 and meet the following requirements.

1) Meet the requirements as given in the above table and

2) Students are required to complete 4 PT Credits which will be counted towards extra-curricular credits (not part of credit requirements mentioned above).

3) Must successfully complete the THREE 4 credit Confluence Honours Projects in semesters VI, VII & VIII and obtain a GPA greater than 8 in these 3 projects.

---

### Five-year Dual-Degree in Building Science & Engineering (leading to B.Tech and MS by Research in Building Science & Engineering)

**Curriculum and Graduation Requirements [Subject to Changes]**

**May 17, 2013**

<table>
<thead>
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<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
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<td>In</td>
<td>MA</td>
<td>IMA101</td>
<td>Mathematics I</td>
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<td>2-0-3-3</td>
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<tr>
<td>I</td>
<td>I</td>
<td>In</td>
<td>HS</td>
<td>IHS101/102</td>
<td>English/HSS Group A</td>
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<td>HS</td>
<td>IHS103</td>
<td>Human Values I</td>
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<td>I</td>
<td>I</td>
<td>Pr</td>
<td>BS</td>
<td>IEC101</td>
<td>Mechanics of Materials</td>
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**Total In-Class Hours per week - 31**

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**SLAB - Meet above Institute Core by the end of Second Year.**

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<td>Pr</td>
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**Available Streams:**

Students may choose three stream electives from any of the following streams:

- Building Automation
- Geotechnical Site Characterization for building use
- Green Buildings
- Asset Management & Facilities Management
- Energy efficiency
- Integrated Building Design
- High-Rise or Tall Buildings
- Heritage Buildings

**Graduate Requirements**

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In order to graduate with B.Tech (Honours) in Building Science & Engineering and MS by Research in Building Science & Engineering, a student must successfully complete 189 course credits and 24 Thesis credits, with minimum CGPA of 7.00 and meet the following requirements.

1) Meet the requirements as given in the above table and

2) Students are required to complete 2 PT Credits which will be counted towards extra-curricular credits (not part of credit requirements mentioned above).

3) Must successfully complete the FOUR 4 credit Honours Projects in semesters V to VIII and obtain a GPA greater than 8.5 in these 4 projects.

---

**M.Tech in Computer Science and Engineering**

The objective of the two-year M.Tech (CSE) programme is to produce post-graduates with advanced knowledge in one or more areas of Computer Science. The programme is designed such that a student can complete it based on advanced coursework alone. However, the students are given the facility to concentrate on a problem by substituting some of the courses with equivalent project work.

The first semester of the M.Tech programme is aimed at providing the necessary breadth in Computer Science and at integrating the students with the instructional philosophy of IIIT, Hyderabad. The subsequent semesters provide avenues for specializing in one or more of the streams. The semester wide distribution of courses is given under the curriculum section.

### Semester I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE603</td>
<td>Advance problem solving</td>
<td>4-0-4-6</td>
</tr>
<tr>
<td>CSE531</td>
<td>Operating Systems</td>
<td>3-1-0-4</td>
</tr>
<tr>
<td>CSE505</td>
<td>Scripting &amp; Comp Environments</td>
<td>3-0-2-4</td>
</tr>
<tr>
<td>CSE611</td>
<td>Direct Maths and algorithms</td>
<td>4-2-0-6</td>
</tr>
</tbody>
</table>

### Semester II

**Student choose a specialization**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bouquet core</td>
<td></td>
<td>3-0-1-4</td>
</tr>
<tr>
<td>Bouquet core</td>
<td></td>
<td>3-0-1-4</td>
</tr>
<tr>
<td>Area electives</td>
<td></td>
<td>3-0-1-4</td>
</tr>
<tr>
<td>Bouquet core / Area</td>
<td></td>
<td>3-0-1-4</td>
</tr>
<tr>
<td>Bouquet core / open</td>
<td></td>
<td>3-0-1-4</td>
</tr>
<tr>
<td>elective / other</td>
<td></td>
<td>3-0-1-4</td>
</tr>
<tr>
<td>elective / project</td>
<td></td>
<td>3-0-1-4</td>
</tr>
<tr>
<td>Independent study</td>
<td></td>
<td>3-0-1-4</td>
</tr>
</tbody>
</table>
Institute Seminar 1-0-0-(P/F)
Summer Break optional but recommended
Student spend the summer with a research center

Semester III

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bouquet core</td>
<td>3-0-1-4</td>
</tr>
<tr>
<td></td>
<td>Area elective</td>
<td>3-0-1-4</td>
</tr>
<tr>
<td></td>
<td>Semester project / Bouquet core / Area elective</td>
<td>3-0-1-4</td>
</tr>
<tr>
<td></td>
<td>Bouquet core / Area elective</td>
<td>3-0-1-4</td>
</tr>
<tr>
<td></td>
<td>Institute seminar</td>
<td>1-0-0-P/F</td>
</tr>
</tbody>
</table>

Semester IV

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Area elective / Bouquet core</td>
<td>3-0-1-4</td>
</tr>
<tr>
<td></td>
<td>Area elective / Bouquet core</td>
<td>3-0-1-4</td>
</tr>
<tr>
<td></td>
<td>Area project</td>
<td>8 credits</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Area elective / CS Elective / Open elective / Other</td>
<td>3-0-1-4</td>
</tr>
<tr>
<td></td>
<td>elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Area elective / CS Elective / Open elective / Other</td>
<td>3-0-1-4</td>
</tr>
<tr>
<td></td>
<td>elective</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits 68
- List of Area / CS / Open / Other Electives will be made available during the registration of every semester

Academic Regulations (Highlights)

Credit Requirements:
- Minimum credits required for graduation is 68. Each semester, every student must register for at least 16 credits and at most 20 credits.
- Every student must register for 20 bouquet core credits. Of the 20 bouquet core credits, at least two must be from the foundations and at least two must be from the systems stream. Further, at least two of these bouquet core courses must be done in the second semester and at least one in the third semester.
- The first semester is common for everyone and is for 20 credits. After the first semester, the student can choose an area to specialize in. The list of areas is given below.
- Every student must register for at least 12 area elective credits from the areas given below. Of these, at least one must be in the second and the third semester each.
- There will be a seminar course mandatory in the second and the third semesters. As part of this course, every student must attend at least half of the notified seminars, presently, notified seminars include M.S. thesis public presentations, faculty candidate talks, and distinguished seminars.
- The areas along with typical topics are as follows. For every elective at the 400+ level, the area under which it belongs shall be made available before registration every semester.

Current Bouquet Electives offered in 2011-12
Foundation Courses

CSE411 Complexity and Advanced Algorithms
CSE471 Statistical Methods in AI
CSE415 Principles of Programming Language
CSE481 Optimization Methods
CSE418 Principles of Information Security

Systems Courses

CSE431 Distributed Systems
CSE441 Database Systems
CSE435 Computer Networks
CSE419 Compilers
CSE461 Software Engineering

Areas of Specialization:

3. **Software engineering**: Software engineering, middleware systems.
4. **Analytics**: Data analytics, Data warehousing, Data mining, Pattern Recognition, Machine Learning, Information Retrieval, Artificial neural networks.

Project Work:

- Of the remaining 16 credits, at most 12 credits can be converted to project credits/independent study credits. The 12 shall be split as (at most) 4 credits in the third semester and (at most) 8 credits in the fourth semester.
- If a student wishes not to do a project, then there is no restriction on the nature of courses that can otherwise be registered for to satisfy these 16 credits. However, these should be 400+ level courses.

Academic Performance:

A student should complete the requirements with a minimum CGPA of 6.5 to receive the M.Tech degree.

Residency Requirements:

- **Full-time students**: Students will have minimum of 4 semesters and maximum of 6 semesters to complete the graduate requirements, failing which they will be terminated from the programme.
• **Part-time students:** Students will have minimum of 4 semesters and maximum of 8 semesters to complete the graduate requirements, failing which they will be terminated from the programme.

**Fees:**

The student has to pay full-time post-graduate fees for the first 4 semesters of study. The fees will be pro-rated to the number of credits registered for thereafter according to the institute’s policies.

---

**M.Tech in VLSI and Computer Engineering**

**About the Program:**

This is an interdisciplinary graduate program that helps shaping the future leaders of VLSI industry. The program emphasizes on the interface between VLSI Design and Computer Engineering and focuses on the application of VLSI Design to Computer Systems Design and Development and also on the algorithmic approach to computer engineering as extended to the area of VLSI design. With recent and rapid upsurge in the area of hardware software code sign for the development of embedded systems, the course is designed to cater to the needs in producing engineers trained in both hardware and software areas bridging the gap between the two communities.

**Objectives:**

1. To develop engineers trained in both hardware and software ready to develop embedded systems including hardware-software code sign

2. To disseminate VLSI design in an approach of encompassing within its folds both the high level algorithmic details and low level circuit details

**Semester -1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE603</td>
<td>Advance problem solving</td>
<td>4-0-4-6</td>
</tr>
<tr>
<td>CSE611</td>
<td>Direct Maths and algorithms</td>
<td>4-2-0-6</td>
</tr>
<tr>
<td>CSE531</td>
<td>Operating Systems</td>
<td>3-1-0-4</td>
</tr>
<tr>
<td>ECE325</td>
<td>Embedded Systems</td>
<td>3-1-0-4</td>
</tr>
</tbody>
</table>

**Semester -2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE361</td>
<td>Introduction to VLSI Design</td>
<td>3-1-0-4</td>
</tr>
<tr>
<td>ET5650</td>
<td>Architectural Design with ICs</td>
<td>3-1-0-4</td>
</tr>
<tr>
<td>Elective 1</td>
<td></td>
<td>3-1-0-4</td>
</tr>
<tr>
<td>Elective 2</td>
<td></td>
<td>3-1-0-4</td>
</tr>
</tbody>
</table>

**Semester -3**
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective 3</td>
<td></td>
<td>3-1-0-4</td>
</tr>
<tr>
<td>Elective 4</td>
<td></td>
<td>3-1-0-4</td>
</tr>
<tr>
<td>Elective 5</td>
<td></td>
<td>3-1-0-4</td>
</tr>
<tr>
<td>Project</td>
<td></td>
<td>4 credits</td>
</tr>
</tbody>
</table>

**Semester -4**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Elective 6</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

**ELECTIVES:**

**Electives in VLSI Stream**

1) Mobile Robotics 3-1-0-4  
2) VLSI Algorithm 3-1-0-4  
3) RFIC Design 3-1-0-4  
4) Photonics 3-1-0-4  
5) Design for Testability 3-1-0-4  
6) Analog & Mixed Signal Design 3-1-0-4  
7) Biomedical Embedded Systems 3-1-0-4  
8) Advanced Analog VLSI Circuits & Systems 3-1-0-4  
9) Computer Architecture* 3-0-1-4

**Electives in Computer Engineering Stream**

1) Compilers 3-1-0-4  
2) Parallel Computing 3-1-0-4  
3) Concurrent Data Structures 3-1-0-4  
4) Advanced Compilers 3-1-0-4  
5) Mobile Robotics 3-1-0-4  
6) VLSI Algorithm 3-1-0-4  
7) Distributed Systems 3-1-0-4  
8) Principles of information security 3-1-0-4  
9) Computer Architecture* 3-0-1-4

* Compulsory elective for both streams

**Academic Regulations (Highlights)**

**Breadth/Depth Requirements:**

A student should take the basic courses in both the stream areas and at least one advanced course in 2 stream areas to qualify for the Masters.

**Credit Requirements:**

- Minimum credits required for graduation is 68. Each semester, every student must register for at least 16 credits and at most 20 credits.
Electives Regulations are as follows

- A student has to take minimum of 3 Electives in the stream in which he/she wants to specialize.
- A student has to take one elective compulsory from the other stream.
- A student can take one elective from any of the two streams.
- A student has to take Computer Architecture as one elective.

For example:-

If a student wants to specialize in VLSI Stream, then 6 electives should be taken as follows:

1. Three electives from VLSI Stream
2. One elective from CE stream
3. One elective can be taken from either of the VLSI or CE stream
4. One elective should be Computer Architecture course

Project Work:

A student has to do a 16 credit hour project under a faculty member in III & IV semesters. Students are expected to be here in Summer.

Academic Performance:

A student should complete the requirements with a minimum CGPA of 6.5 to receive the M.Tech. degree.

Residency Requirements:

- **Full-time students:** Students will have minimum of 4 semesters and maximum of 6 semesters to complete the graduate requirements, failing which they will be terminated from the programme.

- **Part-time students:** Students will have minimum of 4 semesters and maximum of 8 semesters to complete the graduate requirements, failing which they will be terminated from the programme.

Fees:

The student has to pay full-time post-graduate fees for the first 4 semesters of study. The fees will be pro-rated to the number of credits registered for thereafter according to the institute's policies.

---

**M Tech in Computer Aided Structural Engineering**

The objective of the two-year M.Tech(CASE). programme is to include recent advances in the development and use of computer methods for the solution of scientific and engineering problems related to structures.
The students join this program with a background in civil engineering. The course provides an excellent grounding in the fundamentals of structural engineering subjects. It also engages in a comprehensive study of computer science subjects such as programming, databases, graphics, visualization etc.

### Semester wise Curriculum

#### Semester I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Computer Programming</td>
<td>3-1-0-4</td>
</tr>
<tr>
<td></td>
<td>Mechanics of Materials</td>
<td>3-1-0-4</td>
</tr>
<tr>
<td></td>
<td>Concrete Engineering</td>
<td>3-1-0-4</td>
</tr>
<tr>
<td></td>
<td>Structural Dynamics</td>
<td>3-1-0-4</td>
</tr>
<tr>
<td></td>
<td>CASE Project</td>
<td>3-1-0-4</td>
</tr>
</tbody>
</table>

#### Semester II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Computing Tools</td>
<td>4 Credits</td>
</tr>
<tr>
<td></td>
<td>SE/CS Elective</td>
<td>4 Credits</td>
</tr>
<tr>
<td></td>
<td>SE Elective</td>
<td>4 Credits</td>
</tr>
<tr>
<td></td>
<td>SE Elective/Project</td>
<td>4 Credits</td>
</tr>
<tr>
<td></td>
<td>Summer Break</td>
<td></td>
</tr>
</tbody>
</table>

Students are encouraged to do projects in the institute or outside.

#### Semester III

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CS/BE Elective</td>
<td>4 Credits</td>
</tr>
<tr>
<td></td>
<td>SE Elective</td>
<td>4 Credits</td>
</tr>
<tr>
<td></td>
<td>Open Elective</td>
<td>4 Credits</td>
</tr>
<tr>
<td></td>
<td>Project (can take up to 8 credits)</td>
<td>4 Credits</td>
</tr>
</tbody>
</table>

#### Semester IV

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SE Elective</td>
<td>4 Credits</td>
</tr>
<tr>
<td></td>
<td>SE Elective</td>
<td>4 Credits</td>
</tr>
<tr>
<td></td>
<td>SE Elective</td>
<td>4 Credits</td>
</tr>
<tr>
<td></td>
<td>Project (Can register up to 8 credits)</td>
<td>4 Credits</td>
</tr>
</tbody>
</table>

Total Credits 68

### List of Electives

**SE Electives**

- Theory of Elasticity
- Advanced Structural Analysis
- Numerical Methods in Structural Mechanics
- Earthquake Engineering

- Advanced Concrete Technology
- Foundation Engineering
- Soil dynamics
- Rock Mechanics
CS Electives:

DBMS
Numerical Methods
Computer Graphics
Scientific Visualization
Applied Graphics

Other Electives:

Spatial Informatics
Intelligent buildings
Building Automation
Understanding Work and Life

**Academic Regulations (Highlights)**

**Credit Requirements:**

- Student has to acquire a minimum of 68 credits in 4 semesters to become eligible to receive M. Tech in CASE degree.
- They have to acquire a minimum of 24 credits from domain structural engineering subjects (Maximum 52).
- Minimum of 12 credits from computer science subjects (Maximum 20).

**Project Work:**

- And minimum 4 credits from projects (Maximum 24).

**Academic Performance:**

A student should complete the requirements with a minimum CGPA of 6.5 to receive the M.Tech degree.

**Residency Requirements:**

- **Full-time students:** Students will have minimum of 4 semesters and maximum of 6 semesters to complete the graduate requirements, failing which they will be terminated from the programme.

- **Part-time students:** Students will have minimum of 4 semesters and maximum of 8 semesters to complete the graduate requirements, failing which they will be terminated from the programme.

**Fees:**

The student has to pay full-time post-graduate fees for the first 4 semesters of study.

The fees will be pro-rated to the number of credits registered for thereafter according to the institute’s policies.
**M.Tech in Computer Science and Information Security**

The objective of the two-year M.Tech(CSIS) programme is aimed at producing the much needed highly skilled manpower in the area of Information Security, at the same time well versed with fundamentals of Computer Science.

**Curriculum**

**Semester I**
A bridge semester, just like regular M.Tech(cs)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Advanced Problem Solving</td>
<td>4-0-4-6</td>
</tr>
<tr>
<td></td>
<td>Scripting &amp; Comp. Environments</td>
<td>3-0-2-4</td>
</tr>
<tr>
<td></td>
<td>Discrete Mathematics &amp; Algorithms</td>
<td>4-2-0-6</td>
</tr>
<tr>
<td></td>
<td>Operating Systems</td>
<td>3-1-0-4</td>
</tr>
</tbody>
</table>

**Semester II**
A mix of stream and bouquet courses as suitable for the CSIS Program

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Computer Networks</td>
<td>3-0-0-4</td>
</tr>
<tr>
<td></td>
<td>System and Network Security</td>
<td>3-0-1-4</td>
</tr>
<tr>
<td></td>
<td>Bouquet Core Elective</td>
<td>3-0-0-4</td>
</tr>
<tr>
<td></td>
<td>Principles of Information Security</td>
<td>3-0-0-4</td>
</tr>
<tr>
<td>Summer Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Project initiation. Project not graded</td>
<td></td>
</tr>
<tr>
<td></td>
<td>but is mandatory</td>
<td></td>
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</tbody>
</table>

**Semester III**
A mix of project and course options

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Information Security: Research and</td>
<td>3-0-0-4</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Project I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Bouquet/ Area/ CS/ It Elective</td>
<td>3-0-0-4</td>
</tr>
</tbody>
</table>

**Semester IV**
A mix of project and course options. Ideally a continuation of Project I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Project II</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>information Security Audit and Assurance</td>
<td>3-0-0-4</td>
</tr>
<tr>
<td></td>
<td>Bouquet/Area/CS/IT Elective</td>
<td>3-0-0-4</td>
</tr>
</tbody>
</table>

Total Credits

68
M.Tech CSIS - Academic Regulations (Highlights)

Credit Requirements:

- Minimum credits required for graduation is 68. Each semester, every student must register for at least 16 credits and at most 20 credits.
- Every student must register for 28 area credits out of which 12 credits of project can do.
- Every student must register for 20 bouquet credits of which 3 are elective. Of the three, at least 1 must be from Foundations and 1 must be from Systems.
- Student can register for 2 credits if required from other courses.

Bouquet Electives

Foundation Courses

- CSE411 Complexity and Advanced Algorithms
- CSE471 Statistical Methods in AI
- CSE415 Principles of Programming Language
- CSE481 Optimization Techniques
- CSE418 Principles of Information Security

Systems Courses

- CSE431 Distributed Systems
- CSE441 Database Systems
- CSE435 Computer & Communication Networks
- CSE419 Compilers
- CSE461 Software Engineering

Project Work:

- Every student must register for 12 credits of projects in 3rd and 4th semesters 4 and 8 credits respectively.

Academic Performance:

A student should complete the requirements with a minimum CGPA of 6.5 to receive the M.Tech. degree.

Residency Requirements:

- Full-time students: Students will have minimum of 4 semesters and maximum of 6 semesters to complete the graduate requirements, failing which they will be terminated from the programme.
Part-time students: Students will have minimum of 4 semesters and maximum of 8 semesters to complete the graduate requirements, failing which they will be terminated from the programme.

Fees:

The student has to pay full-time post-graduate fees for the first 4 semesters of study.

The fees will be pro-rated to the number of credits registered for thereafter according to the institute’s policies.

---

**M Tech in Bioinformatics**

The objective of the two-year M.Tech in Bioinformatics programme is to strengthen the natural sciences background, and to provide in-depth knowledge in the area of bioinformatics and computational biology.

**Semester wise Curriculum**

**Semester I**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCI XXX</td>
<td>Preparatory courses in Maths &amp; Science</td>
<td>0</td>
</tr>
<tr>
<td>SCI XXX</td>
<td>Bioinformatics Resources</td>
<td>2</td>
</tr>
<tr>
<td>SCI 550</td>
<td>Mathematics and Statistics</td>
<td>4</td>
</tr>
<tr>
<td>SCI 541</td>
<td>Biomolecular Structure Interaction and Dynamics</td>
<td>4</td>
</tr>
<tr>
<td>CS 3000</td>
<td>Computer Problem Solving</td>
<td>4</td>
</tr>
<tr>
<td>CS 3001</td>
<td>Scripting and Computer Environments</td>
<td>4</td>
</tr>
</tbody>
</table>

**Semester II**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCI XXX</td>
<td>Prepartory course in Maths &amp; Science</td>
<td>0</td>
</tr>
<tr>
<td>CS 3010</td>
<td>Computing Tools</td>
<td>4</td>
</tr>
<tr>
<td>SCI 551</td>
<td>Introduction to Bioinformatics</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Bouquet Core</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Domain / IT Elective</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Summer Break</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Summer Project</td>
<td></td>
</tr>
</tbody>
</table>

**Semester III**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCI XXX</td>
<td>CCNSB Seminar</td>
<td>0</td>
</tr>
<tr>
<td>SCI 622</td>
<td>Advanced biology</td>
<td>4</td>
</tr>
<tr>
<td>SCI 651</td>
<td>Advanced bioinformatics</td>
<td>4</td>
</tr>
</tbody>
</table>
SCI 764  Project  4  
Bouquet core  4  

Semester IV  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCI XXX</td>
<td>CCNSB Seminar</td>
<td>0</td>
</tr>
<tr>
<td>SCI XXX</td>
<td>Project</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Topics in CNSB</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Domain elective</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credits  70  

Bouquet core:  
Molecular modeling  
Systems biology  
Computer aided drug design  
Computational structural biology  
Biophysical chemistry  

Electives:  
Thermodynamics and kinetics  
Statistical mechanics  
Classical and quantum mechanics  
Quantum mechanics II  
Quantum computing  
Introduction to nanotechnology  
Pattern recognition  

**Academic Regulations (Highlights)**  

**Credit Requirements:**  
- Minimum credits required for graduation is 70. Each semester, every student must register for at least 16 credits and at most 20 credits.  
- Out of 70, course credits are 58 and project credits are 12.  
- Out of 58 credits Stream credits are 30, Bouquet credits 12, Elective credits 8, and 4 credits of Open Elective  

**Project Work:**  
- Every student must register for 12 credits of projects in 3rd and 4th semesters 4 and 8 credits respectively.  

**Academic Performance:**  
A student should complete the requirements with a minimum CGPA of 6.5 to receive the M.Tech degree.
Residency Requirements:

- **Full-time students:** Students will have minimum of 4 semesters and maximum of 6 semesters to complete the graduate requirements, failing which they will be terminated from the programme.

- **Part-time students:** Students will have minimum of 4 semesters and maximum of 8 semesters to complete the graduate requirements, failing which they will be terminated from the programme.

Fees:

The student has to pay full-time post-graduate fees for the first 4 semesters of study.

The fees will be pro-rated to the number of credits registered for thereafter according to the institute’s policies.

---

**Academic Regulations for MS by Research Programmes**

**MS by Research**

This is a research oriented programme. The admitted students are expected to have an advanced CS/ECE background. There is no prescribed coursework for this program. Students should use the first year to make up for the deficiencies in their background, if any, and to gain advanced knowledge into the stream area of their choice.

**Breadth/Depth Requirements:**

A student should take an advanced course in a minimum of 3 stream areas.

**Credit Requirements:**

A student should take 48 credits at the institute to be eligible for the MS degree of which at least 24 credits should be through course work and at least 24 of which should be MS thesis credits. Credits of courses at level 4000/400 and above only counts towards the degree. Students must register for at least 16 credits for the first three semesters and for at least 4 credits thereafter.

**MS Thesis:**

The MS thesis has to be defended to a committee of 3 faculty members including the advisor, a faculty member from another stream area and a nominee of the Dean (R&D).

**Academic Performance:**

A student should complete the requirements with a minimum CGPA of 7.0 to receive the MS degree.
Residency Requirements:

Full-time students: Minimum of 3 semesters and maximum of 6 semesters.
Part-time students: Minimum of 3 semesters and maximum of 8 semesters.

To continue beyond 3/4 years, explicit approval of the Dean (R&D) needs to be obtained.

Every semester, student must give a 1-page report on the work done in the previous semester and what he/she expects to accomplish in the coming semester. The advisor should add his/her comments in the report. This report should also explain reasons for delay, if any, in detail.

Master of Science by Research as a Dual-Degree Programme in the same discipline

The students of the dual-degree programme receive an MS by Research degree in the respective discipline along with a B.Tech degree. These students follow the respective B.Tech programme for the first four years with the following modifications:

1. They join an honours stream of their choice at the end of 4 semesters and follow all requirements of the honours programme.
2. They must complete 16 credits over the total minimum credit requirements for B.Tech (typically during the first four years). The distribution of this could be:
   a) 4 credits each of project work during the 5th and 8th semesters
   b) 4 credits each of project work during the 6th and 7th semesters in lieu of the B.Tech project.
   c) 1 course of at least 4 credits each extra during the 7th and 8th semesters.
3. 24 credits worth of MS thesis work with the same guidelines as the MS by Research given above.

Breadth/Depth Requirements:

Same as for M.S. by Research programme. That is, at least 24 of the course credits should be in the 4000 level or above. At most 4 credits of projects can count towards this. These courses should also cover a minimum of 3 stream areas. The requirements are expected to be completed by the end of the fourth year of study ordinarily.

Credit Requirements:

16 credits over the total minimum credit requirements for B.Tech (typically in the first 4 years).
24 credits of M.S. thesis (typically in the fifth year).

MS Thesis:

Same as the M.S. programme.
**Academic Performance:**

The student should complete the requirements with a minimum CGPA of 7.0 for the 5 years to receive the MS degree.

**Residency Requirements:**

The BTech degree has the date when s/he completes 8 semesters of study and fulfils all the requirements of B.Tech (except for honours projects credits in lieu of B.Tech project credits) at the institute. The B.Tech degree is given together with the MS degree after completing all requirements for the MS programme.

Minimum of 10 semesters, maximum of 12 semesters. To continue beyond 5 years, explicit approval of the Dean (R&D) needs to be obtained.

Every semester, student must give a 1-page report on the work done in the previous semester and what he/she expects to accomplish in the coming semester. The advisor should add his/her comments in the report. This report should also explain reasons for delay, if any, in detail.

**Converting to the single-degree programme:**

Students admitted to the dual-degree programme from the start cannot convert to a B.Tech only programme.

**Student status:**

The student of this programme is considered to be an undergraduate student for the first 4 years and a post-graduate student subsequently ordinarily. A student with more than 8 credits of backlog after the end of 4 years will be considered an undergraduate student.

**Fees:**

Undergraduate fees apply when the student has a UG student status and thesis students fees will apply thereafter.

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### One-credit seminar course to M.Tech (CSE/CSIS/VLSI&CE) MS by Research / Dual Degree Students


Institute has revised the policy of one-credit seminar course and latest policy details are given below:

1. **Required Students**
   - All MS by Research Students
   - Dual Degree Students
   - M.Tech CSE, CSIS and VLSI & CE Students

2. **No. of Required credits and which semester**
3. No. of Seminars for 1 credit and details of seminars

- 5 seminars in a semester.
- List of Seminars: (Which are announcing from Seminar Mailing list and Academic Office organized Talks)
  - MS / PhD Public Presentations
  - Faculty candidate talks
  - Designated invited talks

4. Registration / Attendance Process:

- Students are required to register at the seminar portal ([https://web2py.iiit.ac.in/seminar](https://web2py.iiit.ac.in/seminar)) for every seminar before attending it. In general, there will be a cap on number of students who will be granted attendance for the seminar. Students will be able to register on the seminar portal on “first come first register” basis. Once the max. limit for a particular seminar is reached, no other student will be able to register.

- There will be an attendance call at the end of seminar for students who registered for seminar attendance and then attended the seminar. Only those who had earlier registered and then attended will be granted attendance.

5. Semester duration

- Monsoon: July to December
- Spring: January to June

The revised policy applies with immediate effect.

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**Academic Regulations for PhD Programmes**

**Ph.D. Programme**

Ph.D. is a research programme. The dissertation is the centerpiece of the programme. The coursework and qualifiers are there to ensure the necessary breadth in the areas for the student.

The semester-wise courses and the planning of Ph.D. study are dependent on the student's background. It is expected that a Ph.D. student takes the relevant courses in first two semesters like the M.S.~by Research students (see above). Thereafter, the steps involved are:

1. Clearing Breadth Qualifier Courses
2. Clearing of Depth Courses
3. Comprehensive Exam
4. Dissertation proposal defense
1. Breadth Qualifier courses

A PhD student should clear 3 or 4 courses (depending on the programme) to test his/her breadth of knowledge in the respective programmes.

2. Minimum Depth course requirements

A PhD student has to complete 4 depth courses other than breadth qualifiers. 1 project course can be taken in place of depth course.

The requirements given above are the absolute minimum that a student must take, regardless of his/her background. Students are encouraged to take additional courses to build breadth and depth of knowledge in areas of their choice.

Thesis Credits:

A student must register for a total of at least 60 credits of doctoral dissertation (called thesis credits) to be eligible for the degree.

Externally registered PhD students must register for 4 thesis credits even when they are at their host Institutions.

3. Comprehensive Exam

The comprehensive exam is meant to assess the student’s capacity to do research and problem solving ability.

After clearing the breadth qualifier, the student will conduct literature survey in the area of his/her research. The student will select a set of research papers in consultation with the Advisory Committee. After studying these papers in depth, and also after studying the related papers in the form of literature survey, the student has to submit a report followed by a presentation and an oral examination by a committee.

The advisory committee consists of the advisor, a subject matter expert and another member outside the area of research.

During the Comprehensive Exam, student is expected to have:

- Clear understanding of the state-of-the-art literature
- Understood the key contributions
- Understanding of significant gap areas
- Understood the scope of research in the chosen research area
- Ability to perform research in the chosen research area

Note: Comprehensive Exam is mandatory to those students who have joined from the academic year 2009-10.

4. Dissertation Proposal:

A doctoral student is expected to defend his or her dissertation proposal to an appropriate committee. The committee should have one expert examiner from the Institute and another examiner from outside of the Institute. They are nominated by the PG Chair and the Dean
A student is declared a Ph.D. candidate after this requirement is satisfied. This is expected to be accomplished before the end of 10 semesters.

5. Dissertation Defense:

The dissertation has to successfully defend to a committee of examiners (and advisors) set up by the PG Chair and Dean (R&D). The committee will have one or two examiners from the Institute and one or two examiners from outside. An examiner from the Institute serves as the chair of the evaluation committee. The dissertation is expected to be supported by accepted publications in conferences and journals of repute.

Academic Performance:

The student should maintain a CGPA of 7.0 in the coursework to become a Ph.D candidate.

Residency requirements:

Minimum is 6 semesters. The maximum duration for a Ph.D is 12 semesters. To continue beyond 5 years, explicit approval of the Dean (R&D) needs to be obtained.

Student must give a 1-page report on work done so far and a brief amount of what needs to be done and when it will be done. The advisor should write a brief report on the students report also. A student cannot register without this permission.

Breadth Qualifier Guidelines

Objective

The aim of the Breadth Qualifiers is to ensure that a PhD student has sufficient breadth in the related areas of the Programme, of which he/she is a student.

Breadth Course Qualification

A student has to take and clear three (3/4) courses from the list of courses given in the respective programme guidelines. Satisfactory performance of a course is defined as getting a grade of ‘B’ or higher in each of the course. One B- grade will be accepted, provided the average must be ‘B’ grade in all the breadth (3/4) courses.

Students who take an advanced course instead of the listed course and show satisfactory performance are deemed to have cleared that requirement.

Programme wise Breadth Qualifier courses/guidelines are given in the next pages as order given below:

Computer Science and Engineering
Electronics and Communication Engineering
Breadth Qualifier for PhD in CSE

Breadth courses

A student has to take and clear any 3 courses (1 each from 2 sets, another from any set) from the following 2 sets by getting an average grade of B or higher.

Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE411</td>
<td>Complexity and Advanced Algorithms</td>
</tr>
<tr>
<td>CSE471</td>
<td>Statistical Methods in AI</td>
</tr>
<tr>
<td>CSE415</td>
<td>Principles of Programming Languages</td>
</tr>
<tr>
<td>CSE481</td>
<td>Optimization Methods</td>
</tr>
<tr>
<td>CSE418</td>
<td>Principles of Information Security</td>
</tr>
</tbody>
</table>

Systems Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE431</td>
<td>Distributed Systems</td>
</tr>
<tr>
<td>CSE441</td>
<td>Database Systems</td>
</tr>
<tr>
<td>CSE435</td>
<td>Computer Networks</td>
</tr>
<tr>
<td>CSE419</td>
<td>Compilers</td>
</tr>
<tr>
<td>CSE461</td>
<td>Software Engineering</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Background</th>
<th>Breadth courses</th>
<th>Depth Courses</th>
<th>Comprehensive Exam</th>
<th>Starting Academic Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG from outside (respective area)</td>
<td>3</td>
<td>3</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>B.Tech from IIIT-H</td>
<td>*</td>
<td>6</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>B.Tech (Honours) from IIIT-H</td>
<td>*</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>M.Tech from IIIT-H</td>
<td>*</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>Converted from MS to PhD without degree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(After completing course requirements</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and making significant progress on</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>research)</td>
<td>*</td>
<td>2</td>
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<td>L1</td>
</tr>
<tr>
<td>MS by Research Graduate from IIIT-H</td>
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<td>2</td>
<td>**</td>
<td>L1</td>
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<tr>
<td>All others</td>
<td>3</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
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</table>

* - Not required as they have finished the courses during their stay at IIIT-H
** - Not required as they have successfully defended their MS Thesis at IIIT-H.

L1: Rs 9000 per month until completing the Breadth Qualifiers and Comprehensive Exam.
L2: Rs 12000 per month after L1.

**Breadth Qualifier for PhD in Electronics and Communications Engineering**

**Breadth Courses**

Four breadth courses need to be cleared.

Any two of Foundation courses listed below

- Probability and Random Processes
- Electromagnetic theory & Applications
- Network Theory
- Linear control systems
- Digital Signal Processing
- Information Theory and Coding

Any two of Advanced courses listed below (this list may be expanded over time)

- Communication Theory II
- Wireless Communication
- Error Correcting Codes
- Signal detection and Estimation
- Antennas and Propagation
- Analog & Mixed Signal Design
- Advanced CMOS VLSI Design
- Modeling and Simulation of High-Speed VLSI systems
- Embedded Robotics
- Mobile Robotics
- Time frequency analysis
- Digital Image Processing
- Speech Signal Processing
- Adaptive Signal Processing
- Multirate signal processing
- Artificial Neural Networks
- Advanced signal and image processing
- Computer Vision

**Clearing the courses:**

Students have to obtain a minimum of B grade in all courses. Attendance rules do not apply for Foundation courses while counting towards the qualifier requirement. The candidate has only 2 chances to clear these courses.

Foundation courses cannot be counted towards the depth course credit requirement for the PhD programme. Attendance rules will apply for depth courses.
Existing students:
The above qualifier requirements are for PhD candidates admitted from the academic year 2010. Candidates, who were admitted into the PhD programme before 2010, need to clear only the Part 2 of the breadth qualifiers.

<table>
<thead>
<tr>
<th>Background</th>
<th>Breadth courses</th>
<th>Depth Courses</th>
<th>Comprehensive Exam</th>
<th>Starting Academic Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG from outside (respective area)</td>
<td>2</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>B.Tech from IIIT-H</td>
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<td>2</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>MS by Research Graduate from IIITH</td>
<td>*</td>
<td>2</td>
<td>**</td>
<td>L1</td>
</tr>
<tr>
<td>All others</td>
<td>4</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
</tr>
</tbody>
</table>

* - Not required as they have finished the courses during their stay at IIIT-H
** - Not required as they have successfully defended their MS Thesis at IIIT-H.

L1: Rs 9000 per month until completing the Breadth Qualifiers and Comprehensive Exam.
L2: Rs 12000 per month after L1.

**Breadth Qualifier for PhD in Civil Engineering (Structural Engineering)**

**Breadth Courses**

Student is expected to have undergone sufficient breadth in the related areas of research. A student has to take and clear three (3) courses from the list given below. Satisfactory performance is defined as getting an average grade of B or higher in these courses.

Students who take an advanced course instead of the listed course and show satisfactory performance are deemed to have cleared that requirement.

**Suggested Breadth Courses**

Problem Solving with programming
Structural Dynamics
Finite Element Method
Mathematical Foundations of Solid Mechanics
### Suggested Depth related Courses

- Numerical Analysis
- Earthquake Engineering
- Computing Tools
- Advanced Structural Design
- Foundation Design
- Advanced Structural Analysis

### Background

<table>
<thead>
<tr>
<th>Background</th>
<th>Breadth Courses</th>
<th>Depth Courses</th>
<th>Comprehensive Exam</th>
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</thead>
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<td>L1</td>
</tr>
<tr>
<td>M.Tech from IIIT-H</td>
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<td>Required</td>
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<td>*</td>
<td>2</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>MS by Research Graduate from IIIT-H</td>
<td>*</td>
<td>2</td>
<td>Waiver on case by case basis</td>
<td>L1</td>
</tr>
<tr>
<td>All others</td>
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<td>4</td>
<td>Required</td>
<td>L1</td>
</tr>
</tbody>
</table>

* - Not required as they have finished the courses during their stay at IIIT-H

L1: Rs 9000 per month until completing the Breadth Qualifiers and Comprehensive Exam.
L2: Rs 12000 per month after L1.

### Breadth Qualifier for PhD in Computational Natural Sciences

Breadth course requirement.

Breadth requirements for the students for respective streams:

**A. Stream I: Fundamental science:**

At least 2 courses from the set:

<table>
<thead>
<tr>
<th>No.</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Equilibrium Thermodynamics and statistical thermodynamics</td>
</tr>
<tr>
<td>2</td>
<td>Elementary classical mechanics and nonlinear dynamics (biology, chemistry and allied areas majors)</td>
</tr>
<tr>
<td>3</td>
<td>Elementary quantum mechanics</td>
</tr>
<tr>
<td>4</td>
<td>Introduction to biology (non-biology majors)</td>
</tr>
<tr>
<td>5</td>
<td>Advanced molecular/biomolecular architecture</td>
</tr>
<tr>
<td>6</td>
<td>Structural bioinformatics</td>
</tr>
</tbody>
</table>
Courses offered so far:

1. Advanced Molecular Architecture
2. Advanced Biomolecular Architecture
3. Classical Mechanics and Elementary Quantum Mechanics
4. Quantum Mechanics II (including Physics of Quantum Computing)
5. Thermodynamics & Statistical Mechanics
6. Introduction to Biology
7. Biomolecular Structure Interaction and Dynamics
8. Intro Bioinformatics
9. Elements of Bioinformatics
10. Algorithm for Structural Bioinformatics
11. Advanced Bioinformatics
12. Complex Systems-I

The minimal level desired is defined by matter included in the following text books:

13. Berkeley Physics, vols. 1-5; Physical Chemistry by P W Atkins;
14. Biophysical Chemistry by Cantor and Schimmel;

B. Stream II: Techniques and applied areas:

At least one of the following:

<table>
<thead>
<tr>
<th></th>
<th>Mathematical and numerical methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bioinformatics</td>
</tr>
</tbody>
</table>

Courses offered so far:

1. Numerical Techniques and Computing
2. Numerical Analysis
4. Numerical Methods for Computer Science

C. Stream III: Computer science related knowledge:

At least one of the following:

<table>
<thead>
<tr>
<th></th>
<th>Programming &amp; Basics of Databases</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IT Workshop</td>
</tr>
</tbody>
</table>

Note: There are courses offered for the B.Tech. Students or M.S./M. Tech students of 'IT in X' areas that may be taken for this stream.
Students either need to do the required courses or acquire the relevant knowledge by independent/self study. When a course with a title matching with a topic above is being offered, students may take that course. If such a course is not offered, then a related course may be taken. If a student feels that (s)he has the required basic knowledge, they may seek a certificate to this effect from the teacher of the course or the coordinator of CNS program.

<table>
<thead>
<tr>
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<td>4</td>
<td>3</td>
<td>Required</td>
<td>****</td>
</tr>
</tbody>
</table>

* - Not required as they have finished the courses during their stay at IIIT-H.
** - Subject to supervisor’s advice
*** - Not required as they have successfully defended their MS Thesis at IIIT-H.
**** - Stipend L2 for those who have qualified CSIR-NET or are hired on JRF/SRF in research projects. Others as per IIIT norms

L1: Rs 9000 per month until completing the Breadth Qualifiers and Comprehensive Exam. L2: Rs 12000 per month after L1.

**Breath Qualifier for PhD in Computational Linguistics**

**Objective:**

The aim of the Breadth Qualifiers is to ensure that a PhD student has sufficient breadth in the related areas of the Programme, of which he/she is a student of.

**Breadth courses**

It consists of clearing a few courses (listed below). Satisfactory performance is defined as getting a grade of B or higher in each of these courses. Students who take an advanced course instead of the listed course and show satisfactory performance are deemed to have cleared that requirement.

**Courses for Breadth requirement for Stream 1:**

a. Students from computer science back ground
Courses for Breadth requirement for Stream 2:
Students from Linguistics/humanities/social science background

1. Computational Linguistics 1
2. Elementary Maths
3. Introduction to Computer and Scripting
4. Computers and Scripting II

Additional Notes:

1. For a IIIT-H student who has satisfied the above requirement/s by taking the course in an earlier Programme, will be deemed to have cleared it.

2. A student who has done an equivalent course in his earlier institution, would be counselled by his programme (or thesis) advisor. He may then be permitted to take the final exam of the course. The grade requirements are as stated above.

<table>
<thead>
<tr>
<th>Background</th>
<th>Breadth courses</th>
<th>Depth Courses</th>
<th>Comprehensive Exam</th>
<th>Starting Academic Level</th>
</tr>
</thead>
<tbody>
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<td>4</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>B.Tech from IIIT-H</td>
<td>*</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>B.Tech (Honours) from IIIT-H</td>
<td>*</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>M.Tech from IIIT-H</td>
<td>*</td>
<td>2</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>Converted from MS to PhD without degree (After completing course requirements and making significant progress on research)</td>
<td>*</td>
<td>2</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>MS by Research Graduate from IIIT-H</td>
<td>*</td>
<td>2</td>
<td>**</td>
<td>L1</td>
</tr>
<tr>
<td>All others</td>
<td>4</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
</tr>
</tbody>
</table>

* - Not required as they have finished the courses during their stay at IIIT-H
** - Not required as they have successfully defended their MS Thesis at IIIT-H.
L1: Rs 9000 per month until completing the Breadth Qualifiers and Comprehensive Exam.
L2: Rs 12000 per month after L1.

**Breadth Qualifier for PhD in Bioinformatics**

**Breadth course requirement.**

Breadth and Depth requirements are to be satisfied by clearing 8 courses in the areas outlined below of which the breadth requirements are:

**Breadth Courses:**

1. Scripting and Computer Environments
2. Introduction to Biology (CSE background)/Advanced Biology (Bio-background)
3. Maths and Statistics
4. Introduction to Bioinformatics

**Depth Courses:**

A. Stream I: **Computer Science:**

At least one course from the set covering the basics on “Programming + Basics of Databases + ITWS”:

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1</td>
<td>Computer Programming</td>
</tr>
<tr>
<td>2</td>
<td>Problem Solving</td>
</tr>
<tr>
<td>3</td>
<td>Advanced Problem Solving</td>
</tr>
<tr>
<td>4</td>
<td>Computing Tools</td>
</tr>
</tbody>
</table>

Note: There are courses offered for the B.Tech. Students or M.S./M. Tech students of 'IT in X' areas that may be taken for this stream.

B. Stream II: **Chemistry and Structural bioinformatics:**

At least one of the following:

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</thead>
<tbody>
<tr>
<td>1</td>
<td>Biomolecular Structure Interactions and Dynamics</td>
</tr>
<tr>
<td>2</td>
<td>Structural Bioinformatics</td>
</tr>
</tbody>
</table>

C. Stream III: **BioStatistics and Bioinformatics:**

At least two of the following:

<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Advanced Bioinformatics</td>
</tr>
<tr>
<td>2</td>
<td>Systems Biology</td>
</tr>
<tr>
<td>3</td>
<td>Computer-Aided Drug Design</td>
</tr>
<tr>
<td>4</td>
<td>Modeling and Simulation</td>
</tr>
</tbody>
</table>
Students either need to do the required courses or acquire the relevant knowledge by independent/self study. When a course with a title matching with a topic above is being offered, students may take that course. If such a course is not offered, then a related course may be taken. If a student feels that (s)he has the required basic knowledge, they may seek a certificate to this effect from the teacher of the course or the coordinator of CNS program.

<table>
<thead>
<tr>
<th>Background</th>
<th>Breadth courses</th>
<th>Depth Courses</th>
<th>Comprehensive Exam</th>
<th>Starting Academic Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG from outside (respective area)</td>
<td>4</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>B.Tech from IIIT-H</td>
<td>4</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>B.Tech (Honours) from IIIT-H</td>
<td>4</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>M.Tech from IIIT-H</td>
<td>*</td>
<td>*</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>Converted from MS to PhD without degree (After completing course requirements and making significant progress on research)</td>
<td>*</td>
<td>2</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>MS by Research Graduate from IIIT-H</td>
<td>*</td>
<td>2</td>
<td>**</td>
<td>L1</td>
</tr>
<tr>
<td>All others</td>
<td>4</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
</tr>
</tbody>
</table>

* - Not required as they have finished the courses during their stay at IIIT-H
** - Not required as they have successfully defended their MS Thesis at IIIT-H.

L1: Rs 9000 per month until completing the Breadth Qualifiers and Comprehensive Exam.
L2: Rs 12000 per month after L1.

**Breadth Qualifier for PhD in Cognitive Science**

**Note:** A Ph.D. thesis in Cognitive Science under the regular CSE Ph.D. program is also allowed. In this case, the student applies for regular CSE Ph.D. program and takes the breadth qualifier for it. We propose that the Foundation part of the CSE Ph.D. qualifier be replaced with taking courses 1–3 from the list of core courses given below and obtaining an average grade of B or above.

Students are required to do a minimum of eight courses within four semesters of entering the program. (If a student enters in the middle of a semester, then the ‘four’ semesters will be counted from the start of the next semester.)

**Core Courses: (4 of the following courses are Compulsory for all)**

1. Introduction to Cognitive Science
2. Research Methodology (Scientific method, design of experiments, statistics for data analysis includes a substantial experimental project.)
3. Cognitive Neuroscience
4. One programming course (Computer Problem Solving or Advanced Problem Solving)

Breadth Courses:

The **four** breadth courses can be taken from the four groups listed below, with the constraint that no more than **one** course from each group will count towards the breadth requirements. The courses listed in these groups below are example courses, and will be updated periodically to include newly offered courses relevant to the program. Reading courses (independent study) can be taken in any of the groups if no regular course is being offered. A grade of B or above is required for each of the eight courses.

**Group Courses:**

**Group 1: Computer Science**
- Artificial Intelligence
- Robotics (Mobile robotics, Cognitive robotics etc.)
- Artificial Neural Networks
- Natural Language Processing
- Computer Vision
- Pattern Recognition
- Digital Image Processing

**Group 2: Philosophy**
- Philosophy of mind and consciousness
- Philosophy of language
- Philosophy of science
- Metaphysics and epistemology

**Group 3: Psychology**
- Perception and attention
- Thinking, reasoning and decision making
- Learning and memory
- Psychology of education
- Cognitive disorders and therapy
- Social cognition

**Group 4: Linguistics**
- Formal semantics
- Cognitive linguistics
- Psycholinguistics

There is no separate depth qualifier. The proposal defense will ensure that the student has done the necessary background research on the thesis topic.

<table>
<thead>
<tr>
<th></th>
<th>Background</th>
<th>Breadth courses</th>
<th>Core Courses</th>
<th>Comprehensive Exam</th>
<th>Starting Academic Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PG from outside (respective area)</td>
<td>4</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td></td>
<td>B.Tech from IIIT-H</td>
<td>4</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>Background</td>
<td>Breadth Courses</td>
<td>Depth Courses</td>
<td>Comprehensive Exam</td>
<td>Starting Academic Level</td>
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<tr>
<td>PG from outside (respective area)</td>
<td>3</td>
<td>3</td>
<td>Required</td>
<td>L1</td>
<td></td>
</tr>
<tr>
<td>B.Tech from IIIT-H</td>
<td>*</td>
<td>6</td>
<td>Required</td>
<td>L1</td>
<td></td>
</tr>
<tr>
<td>B.Tech (Honours) from IIIT-H</td>
<td>*</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
<td></td>
</tr>
</tbody>
</table>

L1: Rs 9000 per month until completing the Breadth Qualifiers and Comprehensive Exam.
L2: Rs 12000 per month after L1.

**Breadth Qualifiers for PhD in Spatial Informatics**

**Breadth Courses**

**A.** Students of non-CSE background are required to do a minimum of 3 courses from Groups 2, 3, 4, and 5 (in consultation with the Advisor).

**B.** Students of CSE background are required to do the foundations and systems part of the breadth courses/qualifiers as specified in PhD in CSE program guidelines.

Average grade of B or above is required for the Breadth Courses. Courses may preferably be done within the first 4 semesters.

**Course Groups are as follows:**

**Compulsory: SI related (Remote Sensing, GIS courses)**

Group 1: Environmental and Natural Sciences, Social Sciences (Domain subjects)
Group 2: Maths, Programming (Computing tools, APS, etc)
Group 3: Visualization (DIP, PR, CV)
Group 4: Algorithms, Databases (Fundamental DB, Data mining)
Group 5: AI, Cognitive Science
<table>
<thead>
<tr>
<th>M.Tech from IIIT-H</th>
<th>*</th>
<th>4</th>
<th>Required</th>
<th>L1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Converted from MS to PhD without degree (After completing course requirements and making significant progress on research)</td>
<td>*</td>
<td>**</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>MS by Research Graduate from IIIT-H</td>
<td>*</td>
<td>**</td>
<td>***</td>
<td>L1</td>
</tr>
<tr>
<td>All others</td>
<td>3</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
</tr>
</tbody>
</table>

* - Not required as they have finished the courses during their stay at IIIT-H.
** - Subject to supervisor’s advice.
*** - Not required as they have successfully defended their MS Thesis at IIIT-H.

L1: Rs 9000 per month until completing the Breadth Qualifiers and Comprehensive Exam.
L2: Rs 12000 per month after L1.

**Breadth Qualifier for PhD in Exact Humanities**

**Objective:** The aim of the Breadth Qualifiers is to ensure that a PhD student has sufficient breadth in research areas of CEH.

**Breadth course Requirements:**

Breadth is defined in four layers:

- **Layer 1:** Thought: Familiarity with Indian thought, Greek (& other classical) thought and Modern thought. (B. Area 0-6 in core code)

- **Layer 2:** Theory: Familiarity with Philosophical reason and systems in Ontology and Phenomenology (B. Area 0, 1, 2 in course code)

- **Layer 3:** Society: Familiarity with Issues and solutions of Human Development and Values (B. Area 5, 6 in course code)

- **Layer 4:** Art: Familiarity with Aesthetic, Arts and Cultural issues and solutions (B. Area 3, 4 in course code)

A student has to take and clear Eight courses/projects pertaining to these layers (1 course each from the above 4 layers and remaining 4 from any layer with the consultation of the advisor). Student may be asked to take up to 12 courses if faculty advises. One course/project from each of the layer is mandatory as qualifier courses. Satisfactory performance of qualifier courses/projects is defined as getting a grade of ‘B’ or higher in 8 such courses/projects. If student teaches a course, it would be taken as a qualifier course. List of breadth courses are available on CEH research centre website.
For a IIIT-H student who has satisfied the above requirement/s by taking the course in an earlier Programme, will be deemed to have cleared it.

<table>
<thead>
<tr>
<th>Background</th>
<th>Breadth Courses / projects</th>
<th>Comprehensive Exam</th>
<th>Starting Academic Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG from outside (respective area)</td>
<td>8</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>B.Tech from IIIT-H</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>B.Tech (Honours) from IIIT-H</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>Converted from MS in Exact Humanities to PhD without degree</td>
<td>2</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>MS by Research Graduate from IIIT-H (other than Exact Humanities)</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
</tr>
<tr>
<td>MS by Research Graduate from Exact Humanities</td>
<td>*</td>
<td>**</td>
<td>L2</td>
</tr>
<tr>
<td>All others</td>
<td>8</td>
<td>Required</td>
<td>L1</td>
</tr>
</tbody>
</table>

* - Not required as they have finished the courses during their stay at IIIT-H
** - Not required as they have successfully defended their MS Thesis at IIIT-H.

L1: Rs 9000 per month until completing the Breadth Qualifiers and Comprehensive Exam.
L2: Rs 12000 per month after L1.

**Breadth Qualifier for PhD in IT in Building Science**

**Breadth Courses**

Student is expected to have undergone sufficient breadth in the related areas of research. A student has to take and clear three (3) courses from the Foundations based on their background. Satisfactory performance is defined as getting an average grade of B or higher in these courses.

Students who take an advanced course instead of the listed course and show satisfactory performance are deemed to have cleared that requirement.

**Suggested Foundation Courses**

a. **Students from CS/IT/EC background**

1. Advanced problem solving
2. Scripting and computer environment
3. Advance computer networks
4. Embedded system
5. Heating and cooling of buildings
b. Students from other background

1. Computer problem solving/Advanced problem solving
2. Scripting and computer environment
3. Computers and scripting II
4. Basic electronics
5. Embedded hardware design
6. Numerical Analysis
7. Mathematics and Statistics
8. Heating and cooling of buildings
9. Computing Tools

Suggested Depth related Courses

1. Intelligent Buildings and controls
2. Linear control systems
3. Illumination engineering
4. Building energy simulation
5. Green Buildings

<table>
<thead>
<tr>
<th>Background</th>
<th>Breadth courses</th>
<th>Depth Courses</th>
<th>Comprehensive Exam</th>
<th>Starting Stipend Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG from outside (respective area)</td>
<td>3</td>
<td>3</td>
<td>Required</td>
<td>L2</td>
</tr>
<tr>
<td>M.Tech from IIIT-H</td>
<td>*</td>
<td>3</td>
<td>Required</td>
<td>L3</td>
</tr>
<tr>
<td>Converted from MS to PhD without degree (After completing course requirements and making significant progress on research)</td>
<td>*</td>
<td>2</td>
<td>Required</td>
<td>L3</td>
</tr>
<tr>
<td>MS by Research Graduate from IIIT-H</td>
<td>*</td>
<td>2</td>
<td>Waiver on case by case basis</td>
<td>L4</td>
</tr>
<tr>
<td>All others</td>
<td>3</td>
<td>4</td>
<td>Required</td>
<td>L1</td>
</tr>
</tbody>
</table>

* - Not required as they have finished the courses during their stay at IIIT-H

L1: Rs 9000 per month until completing the Breadth Qualifiers and Comprehensive Exam.
L2: Rs 12000 per month after L1.
Comprehensive VIVA Examination Guidelines

The Purpose and Process of PhD Comprehensive VIVA Examination

The comprehensive exam is meant to assess the student’s capacity to do research and problem solving ability.

After clearing the breadth qualifier, the student will conduct literature survey in the area of his/her research and his/her advisor will select a set of research papers (typically 8-10 seminar papers published in premier conferences/Journals with high impact factor), which will be forwarded for approval of the Advisory Committee. After studying these papers in depth, and also after studying the related papers in the form of literature survey, the student has to submit a report followed by a presentation and an oral examination by a committee.

The advisory committee consists of the advisor, a subject matter expert and another member outside the area of research.

During the Comprehensive Exam, student is expected to have:

- Clear understanding of the state-of-the-art literature–
- Understood the key contributions–
- Understanding of significant gap areas–
- Understood the scope of research in the chosen research area–
- Ability to perform research in the chosen research area–

The candidate is given a set of questions (this step is optional) by the examiners beforehand based on the papers selected.

The candidate prepares a report and a presentation based on these questions.

Examiners are free to ask more questions during the viva to test the candidate’s ability to do research and understand the research methodologies, problem solving etc.

The default questions (in case the examiners do not ask):

1. What are the main research themes of the papers selected and how are they linked with each other?

2. Select the most important/interesting paper that is related to your planned work and discuss themes and meta-themes of the work and relate this paper to some of the other papers selected.

The report has to be submitted (expected to be 6-10 pages) before the comprehensive viva.
Policy for the completion of the MS/PhD thesis requirements

1. The thesis is academically earned on successful completion of the defense with no significant requirements for additional work or modifications on the thesis are demanded by the committee.

2. If any additional work or modification of the thesis is suggested by the committee, the thesis will be academically earned on the date those are completed to the satisfaction of the committee.

3. The formal requirements of the thesis include submitting the required number of copies, electronic version, etc., to the academic office as per policies of the institute.

4. All academic and formal requirements must be completed before the degree can be awarded to the student. The formal requirements must be completed satisfactorily within 60 days for an MS thesis and within 90 days for a PhD thesis.

5. The date of the degree will be the date of earning it academically if the above deadline is met.

6. If all formal requirements are not met within the stipulated period, the thesis date will be that of meeting those requirements. In addition, a late penalty equal to the postgraduate student status fee will have to be paid as a penalty by the student. This penalty will have to be paid for every subsequent semester until the formal requirements are met.

Policy regarding extra-curricular credits

Starting from the Monsoon Semester 2011-2012, the following policies will be in place for extra-curricular credits to be taken by UG students.

1. Extra-curricular credits (ECCR) may be taken under the following areas:
   a. Physical activity (PT / Sports / Yogaasana / Gardening etc.)

2. a. In the 1st year of the B.Tech. programme, a student must register for 2 credits of morning physical activity in each semester - 2 credits in the first semester and 2 credits in the second semester. Minimum 85% attendance is required in a given semester. In case of unsatisfactory performance or non-registration, a student must register again in their second year and complete it. These 4 credits have to be completed by end of 2\textsuperscript{nd} Year.
   b. If a student does not complete the PT credits by end of his/her 2\textsuperscript{nd} year, he/she has to register for PT credits in the immediate summer by staying in the campus and complete. If the student does not complete in the summer, he/she will not be allowed to register for more than 16 credits in further semesters till he/she finishes the PT credits.

3. The grade will be given as Satisfactory / Unsatisfactory (S/X). The grade will be based on attendance and other criteria that may be established for the respective activities.

4. The extra-curricular credits are separate from academic credits. They are not interchangeable with academic credits and must be satisfied independently. For example, they will not be counted towards Grade Point Averages in any way and cannot be used to satisfy any minimum academic credit requirements or vice versa.
5. To qualify for credits, student must attend the activity regularly (as specified by the activity in-charge) throughout the semester, to the satisfaction of the activity in-charge.

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**Physical Activity Details**

**Important points at a glance**

- PT-Yoga is a mandatory course for all UG students in first 2 semesters.
- 85% overall attendance (6 days a week, excluding holidays and exams) is mandatory in each semester.
- Each semester is divided into 3 segments – separated by 2 mid-semester exams. This effectively means that there are 6 segments available over 2 semesters.
- It is mandatory to take 1 Yoga segment and 2 PT segments (1 PT in each semester). For remaining 3 segments students may opt for any of the three – Yoga, PT or Gardening, in any combination.
- In the mandatory Yoga segment, a student needs to attend at least 20 Yoga sessions.
- Time slots for PT, Yoga will be announced at the beginning of each semester

**Physical activity may be taken in the following areas 1 and 2**

1. Students are allowed to opt for the following as part of PT
   
   A. General exercise, jogging etc (known as PT)
      
      Or
      
   B. Others
      
      i. Gym                                   v. Basketball
      ii. Hockey                                vi. Badminton; only for girls
      iii. Football                             vii. TT; only for girls
      iv. Volleyball                            viii. Gardening

   Note: Maximum no. of students in the above activities will be announced at the beginning of each semester

2. Yoga

**Please note the following:**

1. Primary point of contact for any PT-Yoga related issues (including requests for shifting/exemption due to health or academic reasons) is Mr. Kamalakar. Yogacharya Vinayak ji is primary contact for Yoga specific issues.

2. Number limits put are due to constraints - infrastructure capacity as well as availability of instructors. Gender preference for TT and badminton is offered due to limited capacity, and to provide some suitable sports options to girls. Kindly bear with us.
We hope that students will do physical activities with the goal of training their body/mind and to improve health. These skills will serve you well through your life.

---

**Overload Registration Guidelines**

UG/M.Tech curriculum provides the number of credits that need to be taken in a semester by a student.

A UG Honours student must take four credits of project extra in semesters five and six.

A student with CGPA greater than 8.0 can under exceptional case register four more credits than the prescribed limit for a semester (but no more than 24 credits in a semester).

A UG student with CGPA less than 5.5 can take only maximum of 20 credits in semesters three, four, five and six, and 24 credits or maximum of 6 courses in semesters seven and eight.

**Minimum Credits to be taken in a Semester**

A student is expected to register for at least 16 credits in a semester (Excluding the PT Credits for UG students). (If the registration falls below 12 credits, the student becomes a "part-time" student which requires permission of the Dean.)

**Frequently Asked Questions**

**Q1.** I have completed minimum credits for graduation do I still have to take a minimum of 16 credits in last semester?

**A1.** No. You can take minimum of 16 credits in last semester.

**Q2.** I have failed in few courses, I want to overload to take these courses.

**A2.** Within the limit of credits you can take in a semester, take first the courses that you have failed in the immediate next offering and postpone other courses to later years. You have scope to take more courses in your fourth year.

**Q3.** I want to take 32 credits, allow me. I am final year student allow me to take 28 credits.

**A3.** The maximum credits a student can take in a semester is 24. Even this is very high. The optimum number after third semester is 20 if you are not honours students, otherwise it is 24.

**Q4.** My CGPA puts me to take 20 credits, but the course I want clashes with a core course I have failed and need to take that.

**A4.** In this case take the core course and complete that requirement, postpone the elective course and/other course to later semester. If you fail in a course, you must take it in its next offering.

**Q5.** What are the exceptional circumstances to overload my registration with an extra course.

**A5.** There is flexibility in the curriculum, if you really need to take any course in a semester you can do it, and postpone taking some other course (required/elective/open elective) to future semesters.
Sometimes you might want to really take extra course because the faculty teaching it may not do it again before you graduate. In that case, Dean may give you permission to take this extra course. This permission is given to fourth year students because they are graduating, and third year student if the course is not going to offered again before they graduate, and almost never to second year students.

There has to be a compulsive statement for both fourth year students and third year students about how the course will help you in your future work at the institute, and more importantly why you cannot drop/postpone any other course for taking this course.

---

**Policy regarding the Transfer of unused credits from one programme to another**

Unused course credits taken at IIIT while registered for one programme may be transferred to another programme that the student joins later subject to the following conditions.

1. The course credits should be above the requirements of the earlier programme. That is, all requirements of the earlier programme should be satisfied without counting these courses.

2. Only credits for which the student has got at least a B grade can be transferred to another programme.

3. The transferred credits are to be used towards satisfying the minimum requirements or prerequisite requirements of the target programme.

4. A maximum of 16 credits can be transferred to a target programme.

5. The credits transferred will be deemed to be completed in the target programme at the same level and number as the earlier one.

6. The course name/number, the number of credits, the grade obtained, and the semester of registration will be printed under the heading "Transferred Credits" on the transcripts of the target programme.

7. The transferred credits can be used to satisfy the minimum credit requirements of the target programme but do not count towards the CGPA.

8. The credits to be transferred should be taken not more than 3 years before joining the target programme.

**Exceptions:**

All credits taken under the non-degree PGSSP and UGSSP programmes can be transferred to a target programme, if a student joins one, within 6 semesters of earning them.

Unused credits from other reputed institutions may also be transferred to a target programme at IIIT. Applications with supporting documents should be made to the Dean for this. Decision will be taken on each case after examining the documents.
Attendance Policy

This document gives details regarding implementation of attendance policy (and interprets the announced thresholds more liberally, in case of rounding off the number of classes).

In case of attendance falling between 65% and 85%, the reduced grade bottoms out at D, in other words, the grade is not reduced below D.

<table>
<thead>
<tr>
<th>Courses meeting twice a week (Type 1)</th>
<th>Courses meeting thrice a week (Type 2)</th>
<th>Courses meeting four times a week (Type 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total classes expected to be held in a semester (in 13 weeks)</td>
<td>26</td>
<td>39</td>
</tr>
<tr>
<td>Total classes to be considered (excluding first week of add-drop period)</td>
<td>24</td>
<td>36</td>
</tr>
<tr>
<td>15% absent means classes:</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>25% absent means classes:</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>35% absent means classes:</td>
<td>8</td>
<td>13</td>
</tr>
</tbody>
</table>

Although, students are expected to attend all the classes in a course, grade is not affected if a student is absent for up to 15% of classes in a course. This is to take care of minor personal exigencies that may arise.

For courses of type 1, 2, and 3, here is the summary of the above:

**Type 1 course**

If you Miss:

- (i) 1 Grade less
- (ii) 2 Grades less
- (iii) F Grade

| (i) 1 Grade less | Between 5 - 6 classes |
| (ii) 2 Grades less | Between 7 - 8 classes |
| (iii) F Grade | > 8 classes |

**Type 2 course**

If you Miss:

| (i) 1 Grade less | Between 6 - 9 classes |
| (ii) 2 Grades less | Between 10 - 13 classes |
| (iii) F Grade | > 13 classes |
Type 3 course | If you Miss:
--- | ---
(i) 1 Grade less | Between 8 - 12 classes
(ii) 2 Grades less | Between 13 - 17 classes
(iii) F Grade | > 17 classes

In cases (i) and (ii), the grade is reduced as indicated, but bottoms out at D. In other words, it is not reduced below D. In case (iii), the grade is reduced to F. In case of a course with PCO, if a student has more than 65% attendance, his grade will not be reduced below C-.

In case, a course has only 1 class per week (call them Type 0), the number of classes held would be 13 in a semester. After the first week of add-drop period, the number of classes is 12. This translates to 2 absents, 3 absents, and 4 absents to be within the 15%, 25% and 35% cutoffs respectively. In other words, case (i) if a student misses 3 classes his grade is reduced by 1, case (ii) if she/he misses 4 classes his grade is reduced by two (bottoming out at D). And in case (iii) if she/he misses more than 4 classes, she/he gets an F.

Absence due to participation in inter university sports/cultural events/programming contest, will be treated as on leave, provided prior leave is sanctioned by Dean on authenticated documents submitted by the student(s).

Absence for short term on medical grounds, the student has to submit the medical certificates to the Dean (Academics) through academic office within 2 days from the date of resuming to class work.

Absence for long term on medical grounds, the student has to give intimation to the Dean (Academics) through academics office. The student has to submit the medical certificates to the Dean (Academics) through academic office within 2 days from the date of resuming to class work.

PGSSP Students, as a special case will be given leave for 4 classes over and above the normal 15% attendance limit for all the types. However, no exemption in assignments, tests will be given"  

Responsible Student Attendance Option – RSAO

Although we consider classes to be of great value, purpose of providing the option is to allow students to transcend rules rather than being always asked to follow rules. It would show that if students take responsibility they can rise above the rules but satisfy the spirit of the rules.

a) Students who take the option would be free to attend as many classes as they want. Attendance will be taken normally, but there will be no penalty for lack of attendance;

b) Such students would be eligible for only the grades A, A-, B or F. In other words, grades lower than B will be treated as F.

Implementing RSAO

i) This is an option that the course instructor teaching the course MAY provide to the students registered in the course. It is NOT mandatory for course instructor to provide this option for course they are teaching.
ii) The faculty member informs the academic office that this option is allowed for the course they are teaching. Students will be given the option to select the choice at the beginning of the semester.

iii) This option must be formally exercised by the student at the start of the semester before add/drop date of every semester by filling a form and submitting it in the academic office. Once exercised, the option CANNOT be changed during the course of the semester or later.

iv) This new option is not available to students who are on academic probation.

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**General Guidelines to Invigilators**

1. Invigilators have to collect the question papers from academic office at least **15 minutes** before the commencement of the examination.

2. Issue question papers to the students only at the commencement of the exam time.

3. No student is allowed to attend the examination after **10 minutes**, from the commencement of Mid Semester Examination.

4. No student is allowed to attend the examination after **15 minutes**, from the commencement of End Semester Examination.

5. A short bell will be given at 15 minutes after start of End Sem Exam. No student is allowed in the exam hall after that bell.

6. No student is allowed to leave the examination hall before 30 minutes, after commencement of the examination.

7. Cell phones, reading material, books (unless open book exam) are strictly prohibited inside the examination hall.

8. Invigilators are informed to announce the students before the start of the exam to leave the mobiles outside of the exam hall on their personal responsibility / risk.

9. Borrowing writing material, calculators from other students in the examination hall, is not permitted.

10. A short bell will be given 5 minutes before the end of the exam, to the students.

11. A long bell will be given at the end of the exam to collect answer scripts. Do not allow the students to write the examination after the long bell.

12. Invigilators have to put their signature on the main booklet and all additional sheets, including Question-cum-answer booklet.

13. Answer booklets have to be kept in order as per the attendance before handing over in Academic office.
14. Please mark "A" against the student name in case of absence.

15. For examinations that are at most 90 minutes in duration, normally NO restroom breaks are allowed. For examinations that span more than 90 minutes, normally only one restroom break may be provided.

16. The invigilators are informed to ask the students to place their ID card on the desk before start of the examination, for verification by the invigilators. In case, if any student found not having the ID card, he/she may be asked to bring the card to allow them to write the exam. This should be done before distributing the question papers.

Guidelines for Faculty – Grading and Exams

Objective

This document details guidelines and procedures for conducting examinations and for grading students in courses.

Grading System

IIIT, Hyderabad follows a grade assignment scheme for evaluating a student’s performance in a course. The total mark secured by a student in a course is mapped to a grade.

Grades (taken from Academic Regulations)

There are five grades that reflect performance and are used in computation of grade point average (GPA):

<table>
<thead>
<tr>
<th>Grade</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10</td>
<td>Excellent</td>
</tr>
<tr>
<td>A-</td>
<td>9</td>
<td>Excellent</td>
</tr>
<tr>
<td>B</td>
<td>8</td>
<td>Good</td>
</tr>
<tr>
<td>B-</td>
<td>7</td>
<td>Good</td>
</tr>
<tr>
<td>C</td>
<td>6</td>
<td>Fair</td>
</tr>
<tr>
<td>C-</td>
<td>5</td>
<td>Fair</td>
</tr>
<tr>
<td>D</td>
<td>4</td>
<td>Poor</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
<td>Fail</td>
</tr>
</tbody>
</table>

The other grades that do not carry points and are not used in computation of GPA are:

P – Pass Grade to Human Values courses
S – Satisfactory (for thesis or R&D-apprenticeship course)
X – Unsatisfactory (for thesis/project work)
I – Incomplete (grade to be assigned later)
W – Course Withdrawal by a student within 7 weeks from the registration

A grade is awarded to a student in a course for which he/she is registered, will be based on his/her performance in different forms of evaluation (such as, examinations, labs, projects,
quizzes, assignments) in the course. Each course is required to have a mid-semester exam and a final exam. For a course taken under PCO, the instructor has to place a minimum grade requirement i.e., C- and above for getting a (P) pass grade in the course. In exceptional cases wherein a student could not complete all the requirements (for reasons such as, medical problem or equipment breakdown) for securing a grade in the course, an (I) incomplete grade can be given. An incomplete grade has to be changed to a proper letter grade (A(-), B(-), C(-), D, and F) before the end of the next semester. Otherwise, it will default to a (F) fail grade.

**Types of Grading**

There are two types of grading that can be followed for a course, namely, absolute grading, and relative grading.

**Total Marks and Absolute Grading**

The instructor is free to decide the relative weightages of the exams, quizzes, home assignments, project work, etc., while computing the total. The relative weights should be announced at the beginning of the course, together with any other grade related policy. In case of absolute grading, a predetermined and fixed range of marks is allotted for each grade. A student gets the grade corresponding to the range within which his/her marks fall. The faculty must show care in setting the exams and other assignments so that students who do excellent will get (A) grade.

**Relative Grading**

In relative grading a histogram of total marks obtained by all students is taken and ranges for assigning various grades are decided at the time of giving the grades. These ranges for assigning grades are based on upper limit of percentage (see grade distribution below) of students in a course that can have a particular grade. While deciding the relative grades the course instructor may keep in mind that an excellent performance in his/her judgment gets a ‘A’, a good performance a ‘B’, and so on. A violation of this upper limit will require a reassignment of grades to students.

**Grade Distribution**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/A-</td>
<td>35%</td>
</tr>
<tr>
<td>B/B-</td>
<td>35%</td>
</tr>
<tr>
<td>C/C-</td>
<td>30%</td>
</tr>
<tr>
<td>D/F</td>
<td>as per students' performance.</td>
</tr>
</tbody>
</table>

Notes:

1. The above scheme can be relaxed for small classes <15-20 students, or in courses where in all students perform exceptionally well or exceptionally poor.

2. The faculty needs to use their judgment and expectation from students in the course for grading.
3. Faculty must be very strict in the minimal expected performance from a student in order to pass the course.

This policy will be implemented from Monsoon 2007 onwards.

The course should have absolute cut-offs for pass or fail. Students who just managed to pass can be given D grade.

For post-graduate courses, project work, and electives with fewer than 20 students the above grade distribution can be relaxed.

**Grade Submission**
The grades must be submitted to the Dean of Academics within one week of the last final examination conducted for a semester. This grades due date will be announced to faculty before the start of the final examinations for a semester. If for any particular reason a faculty member cannot submit grades by the grades due date a written permission must be sought from the Dean of Academics. Faculty members who have not submitted grades within two weeks after grades due date must be notified to the Director of institute for further action.

The final grades conforming to grade distribution and uniformity in grading across courses will be released to the students. If required a reassignment of grades will be sought before releasing the grades to the students.

**Examinations**

IIIT, Hyderabad has a policy of evaluating a student through various quizzes, assignments, project work and examinations for a course. It is required that each course must have at least one mid-semester examination, and a final examination. This requirement can be relaxed by seeking a written permission with appropriate justification from Dean of Academics.

**Mid-semester Examination**

An examination is normally required to be conducted as per Institute scheduling of the exam. It is required that the exam is graded and answer sheets be distributed back to the students within two weeks after the conduct of the exam.

**Final Examination**

The final examinations must be held at the stipulated time and day assigned for the course. Before the grades are given to Dean of Academics the students must have opportunity to view their final exam answer books. Therefore, at least one day must be set-aside for this, and students must be notified the time period during which they can view their final examinations. The final exam answer books must be preserved by the teacher for six calendar months. Faculty, if they wish, may deposit the final exam answer books in the Academic Office. Guest faculty and visiting faculty is required to deposit answer books in the Academic Office.

**Combined Grading for End Semester Exams**

A room will be provided for 10 days of combined grading. Facilities: Tables with Chairs, attendant to serve Coffee/Tea and Almara with lock. The faculty requiring combined grading with their TA’s can use this facility.
Showing examination answer books to students

To avoid the tempering of answer books while showing to the students the following suggestion are made by Director and Dr. Prosenjit Gupta which are working out well.

- Show answer books to students in the classroom and ask them to raise any query right then and there. No queries would be entertained later.
- Students should write queries on the 1st page of answer booklets and return the same within 15-20 minutes.
- The faculty may call the student later and discuss if the query is genuine.
- Scratch the blank space in the answer booklet while correcting.
- The TAs should also be present while showing the answer books.

Any tampering of the answer sheets including changing answers or writing additional answers will be treated as a severe misdemeanor and can attract tough penal actions.

**Tuition Fee for Part Time UG/PG Students**

Partial tuition fee for the Part Time UG/PG Students is given below.

**For UG Students:**

- Student Status Fee : 1/6th of the semester fee
- Course Fee : 1/6th of the semester fee (Maximum of 5 Full Courses)

If the course is a Half Semester, fee will be half of the course fee.

A part time UG student can register for minimum of 4 credits and maximum of 8 credits in a semester beyond 4 years if he/she doesn’t complete his graduate requirements in 4 years.

**For PG Students:**

- Student Status Fee : 1/5th of the semester fee
- Course Fee : 1/5th of the semester fee (Maximum of 4 Full Courses)

If the course is a Half Semester, fee will be half of the course fee.

A part time PG student can register for minimum of 4 credits and maximum of 8 credits in a semester. However, student can take up to 12 credits subject to the approval of PG Committee.

**Part Time Students – Payment of Student Status Fee**

M.Tech/MS/PhD part time students during their course registration have to pay 20% of full tuition fee as student status fee since they will use the Institute facilities. (This is in addition to course fee)

**PGSSP Students:**

- Semester Fee : M.Tech Tuition fee
Student Status Fee : 1/5 th of the semester fee
Course Fee : 1/5 th of the semester fee (Maximum of 2 Full Courses)

If the course is a Half Semester, fee will be half of the course fee.

Admission fee of Rs. 10,000/- will be collected from the PGSSP students when they converted to a regular M.Tech programme from the academic year 2013-14.

Hostel Accommodation:

If a Part time student wants to stay in the hostel, they can apply to hostel administration. Rooms will be allotted based on the availability.

Tuition fee for foreign students

Tuition fee for foreign students (M.Tech / MS by Research / PhD) will be collected as follows from the academic year 2009-10.

Tuition fee including boarding and lodging

a. US Dollars 15,000 per annum per student from developing countries.
b. US Dollars 20,000 per annum per student from developed countries.

Tuition fee excluding boarding and lodging

a. US Dollars 14,000 per annum per student from developing countries.
b. US Dollars 19,000 per annum per student from developed countries.

Charges for Boarding and Lodging: $2000 per annum
($1000 per annum for boarding & lodging each)

Tuition Fee for DASA Students

Tuition fee for B.Tech students who have admitted through DASA (Direct Admission for Students from Abroad) will be collected as follows.

Tuition Fee excluding boarding and lodging:

US Dollars 11,000 per annum payable in 2 semesters

Charges for Boarding and Lodging: In Indian rupees only as per the institute rates.
Refund of Tuition Fee Rules

1. Regular Students
Refund of Tuition fee (Approved in the Faculty Meeting held on 11.8.2001)
The present system of refunding the tuition fee whenever students withdraw their new admission is discussed in length. Finally the following decisions are emerged.

i) Declare a cut off date for withdrawal of new admissions

ii) In case a student withdraw his/her admission within the cutoff period, the Institute will keep 25% of the tuition fee subject to maximum of Rs. 10,000/- and refund the balance amount.

iii) No refund of tuition fee after the cut off period

Endorsement by the Director from the “Refund of tuition fee file - note” on 21.8.03
Cut off date for withdrawal may be fixed keeping in mind the fact that we are able to activate the waiting list

2. The following Revised refund of fee for PGSSP students, is discussed and approved in the AAC meeting held on 9.1.2010.

a. During Add-Drop period of first week – 50% on student status fee and total tuition fee.
b. During special drop period i.e 2\textsuperscript{nd} week of registration – No refund of student status fee and 50 % on tuition fee.
c. After special drop period i.e from 3\textsuperscript{rd} week – No refund of student status fee and tuition fee.
d. In case the tuition fee is to be transferred to next semester – The student has to apply within 4 weeks of commencement of classes, the entire tuition fee for a course may be transferred to next semester. The student status fee has to be paid again by the student at the time of registration.

3. Refund rules for Lateral Entry students, was discussed in the AAC meeting held on 17.9.2012 and approved the following rules.

a. Withdrawn on or before Add-Drop after the admission – 75% of tuition fee to be refunded.
b. Withdrawn within a month from the date of admission – 50 % of tuition fee to be refunded.
c. Withdrawn after one month of admission - No refund of tuition fee.

Research Fellowship: Guidelines/Policies
Students of the MS by Research and PhD programmes are called Research Students. Research students could be granted fellowship or casual assistantship. This document describes the procedures to be followed by research fellows. Research students who are not
fellows could be given teaching or research assistantships. The regulations concerning them are exactly the same as that of BTech/MTech TAs and RAs.

**Fellowships to Research Students:**

Fellowships to the research students of the MS/PhD programmes have two components: Tuition Support and Stipend. Either or both could be given to a research student. The tuition support can be from a funded project or from the institute. A student may also pay the fees from their own funds. Various mixes of these are also possible.

Full Fellows receive both tuition support and monthly stipend for the duration of the fellowship. Partial Fellows receive only the tuition support.

**Semester/Term Plan for Research Students:**

A year for the purposes of fellowship consists of three semesters or terms. Summer term runs from May 15th to July 31st, Monsoon semester runs from August 1st to Dec 15th and the Spring semester runs from Jan 1st to the following May 15th.

The faculty advisor or the research centre should plan for each research student before each semester/term begins. The Research Student Support Record form indicating the source of support for each research student should be submitted by the faculty advisor to the office by May 1st for the Summer term, July 15th for the Monsoon term, and December 15th for the Spring term.

The cases of students needing institute support for tuition or TAship/teaching for stipend will be brought to the Director. The Director, in consultation with the TAship Coordinator and/or other faculty member(s), will decide on these requests before the semester commences. This information will be conveyed to the faculty advisors before the semester starts. Such requests should reach the Director 15 days before the deadlines indicated above.

**Expectations from Research Students:**

Research students may be given full or partial fellowship. They have to work for their advisor, a research centre, or the institute for a certain amount of time in return for the support.

**Full Fellowship:**

Full fellowship is covers the tuition fees and the stage-salary the student is entitled to students on full fellowship are expected to spend all their time working for the advisor or a research centre. The students may take courses and undertake other academic engagements with the permission of the advisor.

**Partial Fellowship:**

Partial fellowship covers the tuition fees of the student who are expected to work at least 20 hours a week for the advisor or a research centre. The student may take courses and/or take up TAship or RAships at other times after informing the advisor.

**RAship:**
Quarter-time, half-time, and full-time RAships may be given to research students. These involve working for 10, 20, and 30 hours each week. Deviations from these can be made by mutual consent of the student and the faculty member. Students who are RAs but not on fellowships must work for the corresponding number of hours for the project, advisor, or centre.

**TAship:**

Research students on TAship should perform all duties that the TAship entails.

**Types of Stipends:**

Research students may draw their stipends as RAs, teachers of courses, or TAs to courses. Each student will have an advisor who will allocate the type of work subject to suitability of the students for it.

**RAs:**

The decision to appoint a student an RA is made by the his/her advisor together with the student. This decision could be made for each semester/term or for a longer duration. The level of the RAship and the amount of stipend is decided by the student’s advisor and should be indicated to the student and the office in an offer letter sent in hard copy or email. The stipends will be charged to a project/head indicated by the advisor on the Form of Support that the student fills every semester/term.

**Teachers:**

The selection of research students as teachers is made by the Dean in consultation with the student and the advisor. These students are given a higher stipend as indicated in the guidelines, which also specify from which account the stipend comes.

**TAs:**

RAship is the default support mode for research students. If a research student has to be supported as a TA, the advisor of the student needs to make a request for it as indicated above.

**TA-ship types:**

Currently, the following number of hours of work is expected out of different levels of TAs:

- Quarter TA: 5 hours per week
- Half TA: 10 hours per week
- Full TA: 20 hours per week. Full TAs have to take a reduced course load.

Research students on fellowship receive a stipend determined by his/her academic-stage (L1 to L6). The money they get as TAs is limited to the general TAship rules as applicable to BTech/MTech students. The balance stipend amount and the tuition fees should come from other sources such as a funded project.

**RA-ship types:**

Research Assistantships come in three levels: quarter, half, and full. The default amounts for RAships are given below. Other amounts could also be used but should be specified in the RA appointment letter issued by a faculty member or a research centre to the student. RAships also have a start date and a duration.
Each RA has to give an acceptance in writing to the faculty concerned. Details of other assistantships and/or jobs the student has committed to should be provided in the RA Acceptance Form.

Research students on fellowship receive their stage-salary for full time involvement in project or research work with their advisor.

**Research Students Teaching Courses:**

Rs. 5000/- + Honorarium based on no. of students in the course per month

<table>
<thead>
<tr>
<th>No. of students</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 to 29</td>
<td>Rs. 5000</td>
</tr>
<tr>
<td>30 to 74</td>
<td>Rs. 7000</td>
</tr>
<tr>
<td>75 and above</td>
<td>Rs. 9000</td>
</tr>
</tbody>
</table>

If a course is half semester, the total amount per month will be paid 50%.

A maximum of Rs. 14000 per month will be charged to the institute’s teaching account. If a student gets paid more than that according to the above formula, the amount in excess of Rs 14000 will be charged to an research account indicated by the student’s research centre and/or the advisor.

**Academic Stages of Research Students:**

**MS Students:**

L1: Join with a BTech/MCA/MSc
L2: Join with Masters in CS/ECE (relevant area) or BTech (Hons) from IIIT

**Dual-Degree MS Students:**

L2: Fifth year of study after research background requirements.

**PhD Students:**

L1: Join with a BTech/MCA/MSc.
L2: Join with Masters in CS/ECE (relevant area)
L2: One year after attaining L1
L3: Join with a BTech (Hons) from IIIT
L3: One year after joining/attaining at L2
L4: Complete breadth qualifiers or RBC
L5: Complete dissertation proposal

**RExP Students:**

L3: Join with honours/MS/etc.
L4: Complete breadth qualifiers or RBC
L5: Complete dissertation proposal

**Forms and Terms:**

**TAship Coordinator:**

The faculty who allocates TAs to courses and indicates their level of TAship.
TA Assignments:

The list of TAs, their courses, and their level. Issued by the TAship Coordinator within 2 weeks of the start of each semester.

TA Reporting Form:

A form to be submitted by each TA at the start of the TAship. This form has to be signed by the student and the instructor(s) of the course(s) he or she is a TA for. The details of all other assistantships and/or jobs the student has committed to should be provided in this form.

TA Time Card:

The monthly time-sheet filled by each faculty for each TA of his/her course.

Research Student Support Record Form:

The form submitted by a faculty advisor or centre head indicating the source for the tuition support and the stipend of each research student. This form is to be submitted to the office at least 2 weeks before the start of each semester/term.

RAship Appointment:

The appointment letter given to each RA by the research centre/advisor indicating the level and duration of the RAship. Optionally, an amount of RAship may also be mentioned.

RAship Acceptance Form:

The form to be submitted by each RA to the advisor at the start of the RAship. The details of all other assistantships and/or jobs the student has committed to should be provided in this form.

Form of Support:

The form submitted by each research student at the beginning of each semester. This form indicates the source of the student's support for the semester and should be signed by the student's advisor. If the source of tuition is given as the institute, the form needs to be countersigned by the Director.

Steps for Different Parties:

Research Fellows:

All: Fill the Form of Support in the first week of every semester and at the start of the summer term. Indicate if you are supported for the tuition and the stipend or are paying it from own funds. The form should be signed by the faculty advisor.

TAs: Submit the TA Reporting Form signed by self and the course instructor(s) at the beginning of the TAship.

Teaching: Get the teaching assignment from the Dean and inform the office.

RAs: Submit a RA Acceptance Form to the advisor at the beginning of each RAship.
Research Students not on Fellowship:

Fill the Form of Support in the first week of every semester and at the start of the summer term. Indicate if you are supported for the tuition and the stipend or are paying it from own funds. The form should be signed by the faculty advisor.

Follow the guidelines for BTech/MTech students if you are a TA or RA.

BTech/MTech and other Research Students:

TAs: Submit the TA Reporting Form signed by self and the course instructor(s) at the beginning of the TAship.

Ensure the submission of the TA Time Cards at the end of every month for that month by the instructor(s) of the course.

RAs: Ensure appointment letters indicating the level and duration of RAship is issued.

Submit the signed RA Acceptance Form at the beginning of the RAship.

Student’s Advisor: Submit the Research Student Support Record indicating the source of tuition support and stipend for each research student. This should be done at least 2 weeks before the start of each semester. A single form can contain the names of all students or only a subset of them.

Sign the Form of Support for each research student every semester.

The student with the consent of the advisor should request the PG Coordinator to change the academic-stage of a student based on his/her progress as per guidelines.

For RAs, make sure the appointment letter indicates the level, duration, and (optionally) the amount of assistantship. Research students get default stipend amounts based on their academic level. Deviations to this should be mentioned in the Form of Support or RAship letter.

Inform the office and the PG Coordinator in writing/email about the termination of a student's support, if any.

PG Coordinator: Instruct the office to issue a letter to each student indicating his or her academic-stage on admission to the institute and when corresponding academic progress is made.

TA ship Coordinator: Submit the list of TAs with their levels before the end of the second week of each semester. Inform the office in writing/email about the termination of a student’s TAship, if any.

Dean: Inform the office about the research students who may be teaching a course in the beginning of each semester. Inform the office about the termination of a student’s teaching duties, if any.
**Course Instructors:** Sign the TA Reporting Form for each TA in the course at the start of the semester.

Inform the office and the TA ship Coordinator in writing/email about the termination of a student’s TA ship, if any.

**Director:** Approve the institute support of tuition fees for each student in every semester.

Review the overall appointments and academic-stage fixation of the research students once every semester.

**Office:** Issue letters to research students indicating their level/stage of support, etc., on instructions from the PG Coordinator.

Distribute the Research Student Support Record forms to each faculty advisor a month before each semester/term starts and request him/her to return it to the office before the respective deadlines.

Collect Forms of Support from the students along with the registration for each semester/term.

**Research Fellow RAs:**

Payment begins after the Form of Support is received, signed by the advisor/research center indicating the level and duration of the RAship as per the student’s academic-stage. The amounts will be charged to the project indicated in the form. The student will continue to receive payment for the appointment period if no contrary instruction is received from the advisor.

**Research Fellow TAs:**

First payment (for a half month) will be made on receipt of Form of Support from the advisor and the TA Reporting Form based on the level indicated by the TA assignments made by the TAship Coordinator.

Subsequent payments (for the balance 4 months) are made if no negative report is heard from the instructor of the course.

**Research Fellow Teachers:**

First payment on receiving Deans instruction of which students are teaching which courses.

Subsequent payments (for the balance 4 months) are made if no instructions from the Dean to the contrary.

---

**Summary for each Semester/Term**

- 6 weeks prior to start: Research Student Support Record given to faculty
- 2 weeks prior to start: RSSR forms received by the office
- Start of term: All decisions including institute tuition support/TAship made
- 1st week: Research students submit Form of Support signed by the advisor
The stipend amount paid to different types of TAs:

<table>
<thead>
<tr>
<th>Type</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter</td>
<td>Rs 2500 per month</td>
</tr>
<tr>
<td>Half</td>
<td>Rs 4500 per month</td>
</tr>
<tr>
<td>Full</td>
<td>Rs 7000 per month</td>
</tr>
</tbody>
</table>

The Stipend amount paid to Research Students working as TA:

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours/Week</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter</td>
<td>10</td>
<td>Rs 2500 per month</td>
</tr>
<tr>
<td>Half</td>
<td>20</td>
<td>Rs 4500 per month</td>
</tr>
<tr>
<td>Full</td>
<td>30</td>
<td>Rs 7000 per month</td>
</tr>
</tbody>
</table>

Stage-Salary for Research Students:

The default stipend amounts for each academic stage of the research student are fixed as follows from September 1, 2010.

- L1: Rs 4500 per month
- L2: Rs 7500 p.m.
- L3: Rs 10000 p.m.
- L4: Rs 12000 p.m.
- L5: Rs 14000 p.m.

Change of Program Rules after First Year of UG program

Preamble: A student after their first year can change their program based on their interest and capabilities. A student in a four year UG program can change to any other four year or a Dual Degree (DD) program; a student in a DD program cannot change to another DD program. The guidelines to apply and approval process is given below. The specific guidelines for individual programs are provided separately.

1. First year students are considered for branch change from any four year program to any other four year or a Dual Degree (DD) program.

2. Change of branch is permitted from branch P to Q provided the change does not result in student strength in branch P falling below 10% of sanctioned strength and branch Q does not go 10% above sanctioned strength.

3. Specific programs may have a minimum CGPA eligibility requirement to be considered for branch change.

4. 1) If the number of students in a program is less than 90% of the sanctioned strength, change out of the program is permitted only if there are students changing into the program such that the final strength is at least 90% of the sanctioned strength.
2) If the number of students in a program is more than 110% of sanctioned strength, change into the program is permitted only if there are students going out of the program such that the final strength is at most 110% of the sanctioned strength.

5. In case of more students (than number of vacancies) wanting to change from branch P to branch Q. A priority list will be generated based on grades in courses relevant to program Q (as decided by program Q). In case of a tie, CGPA will be used.

6. And outcome of Interview with program coordinators of program P and Q.

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**Campus General Rules**

1. **Carry of Identity Cards**: All the Students in the Campus have to carry their Identity Cards and they must be in a position to show the same to the Authorities on demand.

2. **Movement Register at Main Gate**: The Students who are leaving/entering campus from 7.00 PM to 12.45 AM have to enter their particulars in the Movement Register which is available with main gate security without demur. Those who leave/enter campus after 12:45 AM to 5:00 AM, have to surrender their ID card with Main gate security. ID cards may be collected from Administration Department, next day with justification of their movement.

3. **Co-operate with Security Personnel**: All the students are informed to co-operate with security personnel who are performing their duties in different places in the campus. Any violation/ misbehavior by the students with security/staff etc will be viewed to seriously.

4. **No Motorized Zone**: The road in front of both NBH and GH is earmarked as a "no motorized vehicles" zone. In case, you are moving heavy goods or transporting handicapped passengers in this area, special permission may be taken for the particular trip from the Supervisor of the security personnel.

5. **Vehicle pass**: Pass is mandatory for keeping two/four wheeler vehicles in the campus and the owners/users are required to register the vehicle and collect the pass from Administration department at main building.

6. **Entry restrictions at hostels**: At any point of time visitors are not allowed to enter into hostel blocks directly. They need to contact the security person located at each hostel block for permission, and wait at “visitors lounge” till the student take inside.

7. **Internal and external Laptop movements**: The students who are carrying laptops within the campus, should make an entry in the registers at the security posts near hostels, academic buildings etc.

8. **Students movement Restrictions**:

   a) Security guards can check the identity cards of all the students for an entry or exit from any building during 10:00 PM to 6:00 AM.

   b) Student movements from 1:00 AM to 5:00 AM will be recorded in a movement register. The responsibility to make an entry in the register lies with the student.
c) Student volunteers will assist the guards at each of the hostels to facilitate the process of movements from 10:00 PM to 2:00 AM. Student have to co-operate with the guards as well as the student volunteers.

d) The canteen will be closed at 12:30 AM. However it will be kept open till 2.30 AM during examinations.

e) The roads from OBH to Main building and Main building to Main Gate will be open for pedestrians from 1AM to 5AM. No other roads should be used during that time. There will be a patrolling by guards throughout the night and any student found anywhere except the above mentioned roads might have to face strict action. No vehicular traffic is allowed between 1AM to 5AM.

f) From 1AM to 5AM the only permissible reason for which a student can be outside a building is to travel from hostel to lab or vice-versa. Guards have the authority to send the students back to their hostels, who are found loitering around in the campus.

g) The two wheeler riders are advised to wear the helmet while driving for their safety.

PATENT POLICY

This document outlines the guidelines to be followed for filing and revenue sharing when patents are filed by different research centers of the Institute.

Version History

<table>
<thead>
<tr>
<th>Version Number</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20 July 2006</td>
<td>Created</td>
</tr>
<tr>
<td>2</td>
<td>25 Feb 2011</td>
<td>Modified revenue sharing clauses/added notes.</td>
</tr>
</tbody>
</table>

Intellectual Property Policy:

This policy is applicable to the faculty, staff, researchers, students and others who are associated with any of the research activities of the institute, collectively called ‘IIITH personnel’. This covers all programmes and projects that are run at the institute. Intellectual property covers – patent, copyright, trademark, design registration, trade secret, confidential information (submitted as reports).

The faculty who is listed as one of the inventors should be actively involved in the commercialization.

This IP policy is applicable to the UG & PG students too and augments the detailed IPR/research guideline is drafted for UG, PG, MS & doctoral students of the institute.
(l) Ownership:

(la) Invention(s):

IIITH shall be the owner of all invention(s) created by teams of IIITH and non-IIITH personnel, associated with any activity of IIITH and/or with prior art of the institute, unless a separate contract or MoU governs the work that had lead to the invention.

Invention(s) created by IIITH personnel without the use of significant IIITH resources and not connected with the profession for which employed at IIITH, shall be owned by the creator(s), after submitting the invention details to the committee.

For invention(s) produced during the course of public or private sponsored and/or collaborative activity, consultancy work, specific provisions related to IP made in contracts/MoU governing the collaborative activity shall determine the ownership of IP.

For invention(s) that come up for patenting and which has substantial prior art from the inventor(s) research from his/her previous work place, the inventor(s) should provide documents to the committee stating the same and also submit a no objection from the previous workplace or association if deemed necessary.

(lb) Copyrightable Work:

Ownership of copyright of all copyrightable work shall rest with the author(s) with the following exceptions:

a. If the work is produced during the course of sponsored and/or collaborative activity, specific provisions related to IP made in contracts governing such activity shall determine the ownership of IP.

b. IIITH shall be the owner of the copyright of work created by IIITH & non-IIITH personnel with significant use of IIITH resources – this includes teaching material, works of art, software, algorithms – however the authors shall have the right to use material in her/his professional capacity.

c. IIITH shall not claim ownership of copyright on books and publications authored by IIITH personnel.

For all other invention(s) or creative works produced at IIITH, if the inventor(s) wish to protect the invention(s) they produce, then they are required to disclose the creative work to the IPR committee. At the time of submission to the committee, the inventor(s) shall submit formally the invention claimed, the date of invention, names of the inventors and other details. The committee though not required to sign confidentially agreement shall abide by the rules of confidentially to protect the inventor(s) IP from diffusing before filing or publication.

(ii) The committee is formed by the Dean (R&D), and will comprise of one person from the industry outreach committee, one or two faculty members and domain experts. The inventor(s) would also be free to suggest names of faculty who are qualified to evaluate the invention.

The committee after due appraisal will decide on the mode for the IP protection costs as per
table 1. In the event the committee decides not to protect the IP the rights (even those filed for protection in specific countries) to the invention will be assigned to the inventor(s). The inventor(s) are free to choose to protect the work on their own. The annual maintenance of any patent filed will also be based on the decision of the committee. All costs for IP protection and the ensuing revenue sharing modes are detailed in Table 1.

(iii) Dispute Resolution:

In case of any disputes between IIITH and the inventor(s) regarding the implementation of the IP policy, the aggrieved party may appeal to the Director of IIITH. Efforts shall be made to address the concerns of the aggrieved party. The Director’s decision in this regard would be final and binding.

(iv) Jurisdiction:

As a policy, all agreements to be signed by IIITH will have the jurisdiction of the courts in Hyderabad and shall be governed by appropriate laws in India.

Table 1: IP filing costs & Revenue sharing

<table>
<thead>
<tr>
<th>Description</th>
<th>Institute / Research Center Contribution*</th>
<th>Inventor Contribution</th>
<th>Revenue sharing ratio Institute/Research Center : Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indian patent where cost of filing &lt; 1 lakh</td>
<td>100%</td>
<td>None</td>
<td>50% : 50% (first 3 years of commercialization)</td>
</tr>
<tr>
<td>International patent / US patent where cost of filing &gt; 1 lakh</td>
<td>100%</td>
<td>None</td>
<td>80% : 20% (till cost of filing is recovered) 70% : 30% (after cost of filing is recovered)</td>
</tr>
<tr>
<td>International patent / US patent where cost of filing &gt; 1 lakh</td>
<td>25% cost (upto1 lakh)</td>
<td>Inventor pays rest</td>
<td>10% : 90%</td>
</tr>
<tr>
<td>Indian/International patent</td>
<td>0%</td>
<td>100%</td>
<td>All rights of the invention are transferred to the inventor(s).</td>
</tr>
</tbody>
</table>

* The Institute/Research Center funding includes the faculty discretionary funds. Notes:

1. All patent filing has to take place through the IP cell. It is mandatory for all faculty/students/staff/researchers of Institute to present the idea to be patented to the IP committee (coordinated by Nirmala Govidan of CIE. Email nirmala.govidan@research.iiit.ac.in). All the inventors should give in writing their contribution to the invention and also state clearly that they have no objection for a patent to be filed.

2. The IP committee will make a decision on the contribution from IIITH General Account for the patent filing, if there is a paucity of funds from the research center. The Committee along with the inventor(s) will decide expenses and revenue sharing percentage share for patent filing based on the options presented in Table 1.
3. At the time of submission of the documents to the committee, the inventor(s) should inform the availability of funds, either from project or faculty discretionary account, for Indian and international patent filing charges.

4. If IP committee is of the opinion that the idea should be patented, the abstract of the idea to be patented along with the names of the inventors shall be published in electronic format as an internal publication. Anyone who wishes to raise objections should do so within 7 days of publication of the notice. If there are no objections, the invention(s) shall proceed for patenting.

If IP committee decides against paying for the patent expenses, all rights of the invention shall be with the inventor(s). In this case, the committee shall submit to the Director and the Inventor(s) the reason(s) for the decision.

**Definitions:**

For the purpose of this policy:

“research work” includes:

(a) inventions patented or patentable under the Patents Act; (b) designs registered or registrable under the Designs Act; (c) software code (d) layout designs for integrated circuits protected under the Layout Designs Act (e) copyright protected under the Copyright Act in original literary works, software code, algorithms, dramatic works, musical works, artistic works, sound recordings, films, broadcasts, cable programmes and typographical arrangements of published editions.

Committee (2011-2012)

Prof P J Narayan , Dean R&D, Chairman
Ms Nirmala Govindan, Convener
Dr Vasudeva Varma
Ms Kavita Vemuri

& Subject Experts.

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**Student Research Policy**

1. **Intent**

It is the Institute Council’s desire to encourage and reward innovative research work within the Institute which leads to the creation of products which impact society.

The purpose of this Policy is to encourage such research within the graduate research student community (i.e. thesis Masters’/dual Degree and PhD students) by:

(a) Acknowledging the partnership between student and Institute in the creation of research work during, and directly related to, the course of the student’s studies;
(b) Protecting the respective interests, including legal rights, of both parties; and
(c) Providing a mechanism for the appropriate sharing, in a mutually beneficial manner, of the financial benefits obtained from any commercial exploitation of the resultant research work.
Graduate research students by consultations with their supervisors or mentors may choose whether they wish to protect their individual contributions arising from their research. For this reason, it is not the intent of this Policy to make in mandatory or assume that students should protect and get a share in the financial benefits of research work when they do not wish to do so. The essential objective of this Policy therefore is to protect the interests of students and the Institute if and when the student wishes to commercially exploit a significant outcome of their research. While this Policy is intended primarily for graduate research students, it would also cover other students with respect to their research (specifically BTP projects) in terms of the provisions of this Policy. The policy is intended to cover the following:

a) Students who are either BTech, MS,MTech & PhD Students or working as researchers at the institute.
b) Research work that has been done in supervision of a faculty guide.
c) Work that has significant component of research or technology from the research centers or labs at the institute.

2. Definitions

For the purpose of this policy:

2.1 “research work” includes:

(a) inventions patented or patentable under the Patents Act;
(b) designs registered or registrable under the Designs Act;
(c) software code
(d) layout designs for integrated circuits protected under the Layout Designs Act
(e) copyright protected under the Copyright Act in original literary works, software code, algorithms, dramatic works, musical works, artistic works, sound recordings, films, broadcasts, educational software packages,

2.2 "Student" means a graduate research student (ie a thesis Master’s or PhD student, BTech honors or BTech dual degree or any person who is working on research projects under the supervision of a faculty).

3. Intellectual Property, Copyright, Trademark

3.11. What is the Intellectual Property which will be owned by the Institute & What is not ? The standard definition adopted is as follows:

IIITH shall be the owner of all invention(s) including software, designs,algorithms, copyrightable material and integrated circuit layouts created at IIITH except:

- Invention(s) including software, designs and integrated circuit layouts, created by Student without the use of significant IIITH resources and not connected with the profession for which employed at IIIT. Such works shall be owned by the creator(s).
- For invention(s) including software, designs and integrated circuit layouts, produced during the course of sponsored and/or collaborative activity, specific provisions related to IP made in contracts governing the collaborative activity shall determine the ownership of IP.
• Non-IIITH Students, who create invention(s) including software, designs or integrated circuit layouts at IIITH but without intellectual contribution of IIITH personnel or significant use of IIITH resources but have spent time as interns or visiting researchers at the institute. These works will be owned by the inventor(s).

In cases of all IP produced at IIITH, IIITH shall retain a non-exclusive, free, irrevocable license to copy/use the IP for research activities, training & teaching consistent with confidentiality agreements where entered into by IIITH.

3.12 Copyrightable Work

IIITH shall be the owner of the copyright of work, including software, drawings & project proposal material developed as part of any of the technical collaboration programs at IIITH created by Students with significant use of IIITH resources with the following exceptions:

• If the work is produced during the course of sponsored and/or collaborative activity, specific provisions related to IP made in contracts governing such activity shall determine the ownership of IP

IIITH shall not claim ownership of copyright on books and publications authored by Students without the significant use of IIIT resources or with support/guidance of IIITH faculty. Such works shall be published by the author(s) with no liability to the institute. Use if any of the IIITH brand name or usage of IIITH affiliation should be passed by Dean R&D. However, the authors shall have the right to use the material in her/his professional capacity.

3.13 Trade Mark(s) / Service Mark(s)

Ownership of trade mark(s) / service mark(s) created for IIITH shall be with IIITH.

3.14 Disclosures, Confidentiality and Assignment of Rights

For sponsored and/or collaborative work the provisions of the contract pertaining to disclosure of creative work are applied. For all other invention(s) produced at IIITH, if the inventor(s) wish to protect the invention(s) they produce, then they are required to disclose the creative work to the IP Committee at the earliest date using an Invention disclosure form.

The inventor(s) shall assign the rights of the disclosed invention to IIITH.
All IIITH Students and non-IIITH Students associated with any activity of IIITH shall treat all IP related information which has been disclosed to them /or whose rights are assigned to IIITH, or whose rights rest with IIIT Students, as confidential. Such confidentiality shall be maintained till the date as demanded by the relevant contract, if any, between the concerned parties unless such knowledge is in the public domain or is generally available to the public.

The Institute does not claim copyright in work or material produced by students during, and directly related to, their courses of studies and agrees that copyright in such work or material is owned by the students who produce it.

When using the research work created by a Student, the supervisor will declare both the self-contribution and the student's contribution in creating the work. The supervisor will not
commercially exploit the research work created with a student without the express written agreement of both the student and the Institute or within a period of 1 year after student has graduated (includes graduating from UG to PG) or if the student has availed a technology transfer for the research work that has been his/her sole contribution to start a company.

4. Procedures

The following procedures are required to facilitate the creation and protection of commercially valuable Research work:

(a) Graduate research students will be required to read and understand the Research work policy when enrolling as students. This policy will be included together with the other information material in the Enrolment Form.

(b) Any Research work or idea and specific know-how with potential commercial applicability already in existence at the commencement of the student’s studies should be appropriately identified and noted in files which will be maintained by the supervisor. This also includes use of open source software that is protected under GPL or any other licenses. The purpose of this Statement is to accurately identify, and hence appropriately protect, the student’s contribution in the creation of any subsequent Research work and to minimize the possibility of any conflict of interest.

(c) When research activity generates results that are novel and have potential commercial applicability, students should immediately advise the Dean(R&D), through his or her supervisor. The Dean will make an assessment of commercial applicability, and, where appropriate, will initiate formal procedures to initiate an agreement. This agreement will include the student and Institute ownership proportions of the Research work and the term of the relationship, to protect the Research work. Any costs involved for patent filing or copyright protection will be paid by the Institute as per the institute’s IP policy.

(d) In order to safeguard any Research work created within the Institute, it is important that students are cautious in publishing the results of research activity with potential commercial applicability. It would be in the best interests of the student and the Institute to not publish until a quick assessment is done for potential patentability by the supervisor. This decision shall be made expeditiously, so that publication of the student’s work is not unreasonably delayed.

(e) Student is advised to maintain full records of all documentation related to the creation of Research Work and to keep the Institute informed of their contact details.

5. Distribution of income from Research Work

Any royalties or other remuneration received by the Institute as a consequence of licensing, selling, or otherwise dealing with Research work which the Institute claims part-ownership of pursuant to this Policy, shall be distributed in a manner consistent with the institute IP Policy (which is published in the institute intranet site); the agreement entered into with the student (paragraph 4(c)) after the Research work is created; and any Statement of Prior Research work, if applicable (paragraph 4(b)). Any distribution of revenue for a Research work will be for a period not more than 2 years subject to the following variations:

1. Patent – 50% to the inventors and 50% to the institute. The time period is from the date of issuance of patent. In the event the commercialization starts before the issuance of the patent, the revenue will be treated as non-patented Research work and if & when the
patent is issued and commercialization continues the balance will be adjusted accordingly.

2. Non-patented Research work – a onetime grant of 50% of the first licensing fee.

The above conditions do not apply if the student starts a company based on technology transfer from the Institute, wherein the technology is his/her Research work or work that includes contributions from many others. This will be achieved via a Technology Transfer Agreement. This percentage contribution will be determined through a process of consultation between the student and the Institute, including the student's supervisor(s), with a view to reach an agreement. It is the Institute’s intent that the percentage contribution should represent an accurate, mutually agreeable, fair and reasonable figure. If required, an appropriate third party, agreeable to by the student and the Institute, may be requested to independently assess the relative value of contributions by the student and the Institute and to make a final and binding decision.

3. The Institute’s share of the royalties and other remuneration will be divided in accordance with the relevant provisions of the Institute’s Policy for Intellectual Property Rights.

6. Cessation of study

When a student who is entitled to payments pursuant to paragraph 5(b) leaves the Institute upon completion of their studies, or meets untimely death while enrolled as a student at the institute, the payments will continue either to the student in the case of the former or to his or her estate in the case of the latter for a period not more than 2 years as per paragraph 5. In the event the student discontinues studies than there would be no payments.

7. Redress

(a) Any complaints related to the application of this Policy, including the apportionment of income from the Research work, should be made in writing to the Dean R &D /Director.

8. External Research Contracts

(a) The Institute may enter into contracts to provide research resources to external clients, including those in the commercial sector. Ownership of Research work generated by such research, and distribution of income from that Research work will be governed by the terms of the contracts, and paragraphs 4, 5, 6 and 7 above will not apply.

(b) Students engaged in such contract research must:

i. Be fully informed in writing of the Research work/Intellectual Property provisions that have been arranged;
ii. Give their consent to these arrangements prior to beginning their research; and
iii. Comply with all contract terms and conditions, including any confidentiality requirements and publication constraints.
Administrative Structure of the Institute

Chapter 1

Apex Level Governance

1.1 Statutory Bodies

There are four statutory bodies as per Rules & Regulations of IIIT Hyderabad.

- Governing Council or Governing Board
  - Finance Committee
  - Executive Committee
- Academic Council

1.2 Authorities of Institute

- Chairman, Governing Council
- Director & Chairman, Academic Council
- Dean (Academics)
- Dean (R&D)
- Dean (Faculty)
- Dean (Students)
- Registrar

The other important functionaries are

- Finance Officer
- Controller of Examinations
- Head, Education Outreach
- Head, Industrial Outreach
- Administrative Officer
- University Engineer
Chapter 2

Director

Director is the executive head of the institution.

Areas of Work & Apex Committees

- Academic Affairs (Academic Council)
- Research & Development (R&D Steering Committee)
- Faculty Affairs (Faculty Affairs Committee)
- Student Affairs (Student Affairs Committee)
- Outreach Division (Director)
  - Education Outreach (Head)
  - Industrial Outreach (Industry Outreach Committee)
- Information Infrastructure & Software Division
- General Administration (Administrative Committee)

The above are detailed out in the chapters that follow. All committees of the Academic Council are recommendatory bodies to the Academic Council. All other committees are recommendatory bodies to the Director.

Chapter 3

Academic Affairs

Academic Affairs Committee

- Chair, Academic Council [Chair]
- Dean (Academics) [Member Convener]
• Dean (R&D) [Member]
• Chair, UG Academic Board [Member]
• Chair, PG Academic Board [Member]
• Dean(Students) [Member]
• Director’s nominees (2) [Member]

Responsibilities

• Recommendations of all academic committees (listed in this chapter) come to this committee first. (Recommendations of Academic Boards which go to Chairman, Academic Council are usually referred to this committee for consultation.)
• Course allocation to faculty
• Issues for interaction with statutory bodies (UGC, AICTE, MHRD, etc.)
• Important issues related to academics as and when they arise.

3.1 UG Academic Board
(Standing Board of Academic Council)

• Dean (Academics) [Chair]
• UG Program Coordinators (one for each program) [Member]
• Transdisciplinary Program Coordinators (one for each program) [Member]
One of the coordinators (typically, from a UG program) is elected as the convener.

Responsibilities

• UG curricula
• BTech Project policies & monitoring
• Announcements for summer projects at RCs
• Monitoring of curricula of UG academic programs
• Approve new UG courses or updates to existing UG courses
• Dealing with academically deficient students

3.1.1 UG Program Committee

One committee for each UG degree program.

• Program Coordinator appointed by Director [Chair & Convener]
• UG Academic Board Chair nominees (2) [Member]
• Program Coordinator nominees (2) [Member]

Responsibilities

• Monitor the running of the program
• Forward new UG courses or updates to existing UG courses to UG Academic Board
• Prepare inputs to curriculum
• Any special matters related to program or students in the program

3.2 PG Academic Board

(Standing Board of Academic Council)

• Appointed by Chair, Acad Council [Chair & Convener]
• All PG Program coordinators [Member]
Responsibilities

• PG curricula
• PG projects
• Monitoring of curricula
• Approval of new PG courses or updates to existing PG courses
• MS/PhD students theses (with PG Chair)

3.2.1 PG Program Committee

One committee for each area covering PG programs (M.Tech, MS, PhD etc) in that area.

• Program Coordinator [Chair & Convener]
• Nominees of Chair, PG Academic Board (2) [Member]
• Program Coordinator [Member]

Responsibilities

• Academic Program-design and monitoring
• Curriculum
• Forward PG course proposals for new courses to PG Academic Board
• Student seminars
• Project
• Program brochure/web page
• Placements

3.3 PG Admissions Committee

• Appointed by Chairman, AC [Chair]
• Chair, Standing Committee for Research Admissions [Member]
• Dean (A) Nominees (4-5) [Member]

Responsibilities

• Advertisement
• Applications
• Question paper setting
• Conducting PGEE
• Interviews
• Results

3.4 Standing Committee for Research Admissions

• Appointed by Chairman, AC [Chair]
• Nominated by Dean (A) [Member]
• Nominated by Dean (R&D) [Member]
• Expert (coopted based on area of candidate) [Member]
Responsibilities

- Receive applications for admissions to all research programs (MS, PhD, MPhil, etc.)
- Response to applicants
- Conducting interviews etc. as necessary
- Granting admission
- PGSSP admissions
- Conversion to Masters/PhD research programs (does not deal with dual-degree programs)

3.5 UG Admissions Committee

- Dean (A) or nominee [Chair]
- Appointed by Director (3) [Member]
  (Usually, Program Coordinators of trans-disciplinary programs.)

Responsibilities

- Advertisement
- Applications
- Question paper setting
- Conducting written exam., if any
- Interviews
- Results

3.6 Timetabling & Almanac Coordinator

- Appointed by Dean (A) [Coordinator]

Responsibilities

- Preparation of almanac
- Present it before AAC and faculty meeting for approval

3.7 Teaching Assistantship Coordinator

- Appointed by Dean (A) [Coordinator]

Responsibilities

- TA allocation

3.8 Scholarship and Academic Awards Committee

- Appointed by Director [Chair]
- Nominated by Dean (A) (2) [Member]

Responsibilities

- Draw up policies for grant of scholarships & academic awards
• Receive applications
• Decide on scholarships & awards, forward to Dean (A)

3.9 Convocation Committee

• Appointed by Dean (A) [Coordinator]
• Nominated by Dean (A) [Associate Coordinator]
• Institute Communications Coordinator [Member]

Responsibilities

• Information to graduating students
• Convocation dress
• Rehearsals
• Finalization of program
• Venue setup
• Press & electronic media

Chapter 4

Research & Development

R&D Steering Committee

• Director [Chair]
• Dean (R&D) [Member Convener]
• Dean (Faculty) [Member]
• Dean (A) [Member]
• Head of each major RC/RL [Member]
• Nominated by Director (2) [Member]

Responsibilities

• Institute-wide research planning
• Coordination among RCs/RLs
• Address issues of common concern across RCs/RLs
• Policy of sharing research revenue from projects
• Finance policy regarding projects
• Approval of new RCs/RLs or closing down of existing ones
• Policy regarding seed projects or major internal Institute projects
• Brochure/Websites

4.1 Research Centre or Research Lab

Research Centre Committee

(One for each Research Centre or Research Lab (RC/RL))

• Head RC/RL (appointed by Director) [Chair]
• Upto 6 faculty members in the RC/RL [Member]

Responsibilities
• Research planning
• Projects
• Centre staff
• Student issues
• Research Centre or Research Lab administration
• Participation in institute events (R&D Showcase, etc)
• Centre brochure
• General maintenance of Centre
• Finance & Accounts

(In time to come, the RC/RLs may be grouped under Schools. For example, the following might be the Schools: Information Sciences (or Core IT), Natural Sciences, Engineering (other than CSE, ECE), Humanities, etc. Each School will have its Head, who would work for coordination among the RC/RLs under it.)

4.2 Students Research Travel Grants Committee

• Appointed by Director [Coordinator]
• Nominated by Dean (R&D) (3) [Member]

Responsibilities
• Policies regarding travel to attend conferences, workshops
• Receive applications and decide the grants

4.3 Seed Projects Committee

• Dean (R&D) [Chair]
• Nominated by Director (3) [Member]

Responsibilities
• Policies regarding seed projects
• Receive applications and recommend grants for seed projects

Chapter 5

Faculty Affairs

Faculty Affairs Committee

• Director [Chair]
• Dean (Faculty) [Member Convener]
• Dean (R&D) [Member]
• Dean (A) [Member]
• Nominated Heads of RC/RL by Director (2) [Member]
Responsibilities

- Faculty hiring
- Faculty appraisal
- Faculty mentoring
- Sabbatical & long leave
- Approval of requests by faculty for attachment to RCs/RLs

5.1 Faculty Hiring

5.1.1 Faculty Search Committee

- Dean (Faculty) [Coordinator]

Responsibilities

- Receive applications
- Initial screening and short listing
- Pro-actively identify potential faculty
- Invite for seminar and interaction
- Identify the host faculty
- Organize presentation and discussion

5.1.2 Faculty Selection Committee

- Director [Chair]
- Dean (Faculty) [Member Convener]
- Dean (Students) [Member]
- Dean (Academics) [Member]
- Dean (R&D) [Member]
- Subject expert [Member]
- Program coordinator or nominee [Member]

Responsibilities

- Take decisions on regular faculty hiring

5.1.3 Lecturer Committee

- Director [Chair]
- Dean (Faculty) [Member Convener]
- Nominated by Director (2) [Member]
- Subject expert [Member]

Responsibilities

- Receive applications
- Take decisions on lecturer hiring
- Consult respective programs & research centres for needs and requirements
5.2 Faculty Appraisal Committee

- Director [Chair]
- Dean (Faculty) [Member Convener]
- Dean (A) [Member]
- Dean (R&D) [Member]
- Dean (S) [Member]

Responsibilities

- Regular yearly appraisals of faculty
- Suggestions on performance
- Promotions

5.3 Faculty Orientation & Training Cell

- Appointed by Director [Coordinator]

Responsibilities

- Give orientation to new faculty
- Training workshops for new faculty
- Workshops for existing faculty

Chapter 6

Student Affairs

Student Affairs Committee

- Director [Chair]
- Dean (Students) [Member Convener]
- Chair CoW [Member]
- Coordinator HV Cell [Member]
- Chair SLC [Member]
- Dean (Academics) [Member]
- Nominated by Director (2) [Member]

Responsibilities

- Overall student life
- Student activities - Sports, Cultural, Campus Life
- Hostel life
- Mess
- Student Parliament interaction & supervision
- Institute Events - Foundation day, Felicity, Independence day, Republic day, Festivals
- Health care
6.1 Council of Wardens
- Appointed by Director [Chair]
- All wardens [Member]
- Caretaker [Non-member Convener]
- Other Caretakers [Invitees]

Responsibilities
- Student interaction
- Hostel committee
- Mess committee
- Room allocation policy
- Regular maintenance policy
- House keeping policy
- Collection of rents (as applicable)
- Health

6.1.1 Hostel and Mess Committee
(One for each hostel and one for all the messes combined)
- Chief Warden of the hostel/mess [Chair]
- All Wardens of the hostel/mess [Member]
- Caretaker [Non-member Convener]

Responsibilities
- Weekly meetings
- Room allocation
- Shops & other services
- Regular maintenance

6.1.2 Health & Medical
- One of the Warden appointed by Chair CoW [Coordinator]

Responsibilities
- Proper running of Arogyaa
- Dealing with doctors
- Individual record of each student
- Regular health camps

6.2 Student Life Committee
- Appointed by Director [Chair]
- Coordinators, Cultural [Member]
- Coordinators, Sports [Member]
- Coordinators, Campus life [Member]
- Chair, Activities & NSS [Member]
- Chair, CoW [Member]
- Nominated by Dean (Students) (2) [Member]
Responsibilities

- Student activities on campus
- Student Parliament interaction and supervision
- Felicity event
- Sports activities
- Cultural activities
- Campus life
- Clubs/Activities and NSS
- Student mentor-ship for freshers
- Magazines (Ping, etc.)
- Student non-academic awards
- Special assistance to students from special backgrounds (including rural)

6.2.1 Cultural Committee

- Appointed by Dean (Students) [Cultural Coordinator]
- Appointed by Dean (Students) [Member]
- Cultural instructor [Member Convenor]

Responsibilities

- Cultural calendar
- Cultural activities
- Felicity

6.2.2 Sports Committee

- Appointed by Dean (Students) [Sports Coordinator]
- Appointed by Dean (Students) [Member]
- Physical education instructor [Member Convenor]

Responsibilities

- Sports calendar
- Physical exercises
- Sports meet
- Inter-batch and Inter-house sports competitions

6.2.3 Campus Life Committee

- Appointed by Dean (Students) [Campus Life Coordinator]
- Appointed by Dean (Students) [Member]
- Chair, Activities & NSS [Member]

Responsibilities

- Campus life calendar
- Festivals & celebrations
- Talks
6.2.4  Student Activities & NSS

- Appointed by Dean (S) [Coordinator]

Responsibilities

- Student activities (particularly service activities)
- NSS

6.2.5  Student General Awards Committee

- Dean (S) [Coordinator]
- Chair, SLC [Member]
- Nominated by Director (1) [Member]
- Nominated by Dean(S) (1) [Member]
- Coopted as necessary [Member]

Responsibilities

- Selection of students for non-academic awards including Banyan Award, Best All Rounder Award, and other awards for games and sports, culture, campus activities, service etc.

6.2.6  Counselling

Institute Counsellor

Responsibilities

- Individual cases of student counselling

International Student Counsellor

Responsibilities

- Facilitating international students

6.3  Human Values Cell

- Appointed by Director [Coordinator]

Responsibilities

- Monitor student environment with respect to Human Values
- Interface student life with Human Values
- Student Counselling, particularly group counselling
- Work with Institute Professional Counsellor, when needed
6.4 Student Disciplinary Committee

- Appointed by Director [Chair]
- Chair, CoW (or nominee) [Member]
- Chair, HV Cell [Member]
- Nominated by Dean (S) (2) [Member]
- Nominated by Student Parliament (subject to acceptance) [Member]

Responsibilities

- Serious student disciplinary cases as brought by SLC, CoW, Gender Committee, etc. (Seriousness of case is determined by the respective committees. A case in which punishment of more than 2-weeks of academic suspension is to be considered serious.)
- Serious student misconduct cases based on complaints or otherwise.

6.5 Grievance Redressal Committee

- Registrar [Chair]
- Professor [Member]
- Administrative Officer

6.6 Ombudsman Committee

- Registrar [Chair]
- Professor [Member]
- Administrative Officer

6.7 Anti-Ragging Committee

- Chair SLC [Chair]
- Professor [Member]
- Human Values Coordinator [Member]
- Associate Professor [Member]

Chapter 7
Outreach Division
Director [Head, Outreach Division]

Areas of Outreach

- Education Outreach
- Industry Outreach
- Placements
- Institute Events
- Institute Communications
- Alumni Affairs
7.1 Education Outreach

- Appointed by Director [Head]
- Appointed by Director [Associate Head]

Responsibilities

- Training programs for faculty of engineering colleges (Ex. Enhance Edu)
- Training programs for students of engineering colleges
- Excitement of Research (ExOR)
- Coordination of workshops, & conferences
- Short courses for academia, industry, etc.
- AP Govt interface for outreach
- MSIT Program related non-academic matters
- MoU with Universities

7.1.1 MSIT Program

- Appointed by Director [Coordinator]

Responsibilities

- Smooth running of MSIT Program
- Liaison with CIHL
- Interface with Dean (A) on academic matters

7.2 Industry Outreach Committee

- Director [Chair]
- Dean (R&D) [Member Convener]
- Nominated by Director (2) [Member]
- Head, Centre for Innovation & Entrepreneurship [Member]

Responsibilities

- Industry Outreach activity
- Industrial Liaison & Consultancy
- Patents
- Fund raising
- Entrepreneurship & Incubation
- Banyan Intellectual Ventures (IPR & equity holding society of IIIT-H)
- Engineering Technology & Innovation
- Policies and issues related with consultancy

7.3 Placements Committee

- Appointed by Director [Coordinator]
- Nominated by Dean (R&D) (2) [Member]
- Placement Officer [Member convener]
Responsibilities

- Placements
- Placement brochure
- Discuss with each program coordinator regarding placement strategy

7.4 Institute Events

- Appointed by Director [Coordinator]

Responsibilities

- R&D Showcase
- ExOR
- Visitors
- Conferences
- Seminars & Talks
- Distinguished lectures

7.5 Institute Communications

- Appointed by Director [Coordinator]
- Head, Education Outreach [Member]
- Member-Convenor, Industrial Outreach [Member]
- Nominated by Director (2) [Member]
- Institute Communications Manager [Member convener] (Earlier called Brand Manager)

Responsibilities

Institute external communications

- Institute website
- Institute brochure
- Blogs
- Social networks
- Publications portal
- Press releases

7.6 Alumni Affairs Committee

- Appointed by Director [Chair]
- Nominated by Dean (S) [Member]
- Institute Communications Manager [Member]

Responsibilities

- Alumni contacts
- Services to alumni
- Fund raising
Chapter 8

Information Infrastructure

Director

8.1 Library Committee

- Appointed by Director [Chair]
- Nominated by Director (2) [Member]
- Chief Librarian [Member Convener]

Responsibilities

- Allocate budget for books, journals, magazines, e-content, etc
- Policy regarding issue of library materials
- Policy regarding library usage, hours of library opening, issue policy etc

8.2 Computer & Technical Resources Committee

- Appointed by Director [Chair]
- Nominated by Director (2) [Member]
- Technical Manager [Member Convener]

Responsibilities

- Planning & running of computing services
- Campus wide network
- Central servers
- UPS, etc

8.3 Information Services

- Appointed by Director [Coordinator]
- Nominated by Director (2) [Member]

Responsibilities

- Build & support ISAS (Institute Student Academic System) portals
- Computer services and portals for Institute

8.4 Free & Open Software

- Appointed by Director [Head]

Responsibilities

- Inspire students
- Start coordinated FOSS projects
• Arrange help with FOSS projects
• Interface with external FOSS groups

8.5 Software Integration & Development Division Interface

• Appointed by Director [Head]

Responsibilities

• Interface with SIDD located in Banyan Intellectual Initiative

Chapter 9

General Administration

Administrative Committee

• Director [Chair]
• Registrar [Member Convener]
• Dean (A) [Member]
• Dean (R&D) [Member]
• Dean (S) [Member]
• Finance Officer [Member]
• Administrative Officer [Member]
• Manager Administration [Member]
• University Engineer [Member]

Responsibilities

• Finance
• Admin affairs
• Information infrastructure
• GC Meetings
• Engineering & Construction
• Security
• Campus services
• Beautification
• Space allocation
• Residential quarters
• Staff appraisal
• Emergency Medical Fund

9.1 Operations

• Registrar [Coordinator]

9.1.1 Campus Security

• Registrar [Chair]
• Nominated by Director [Member]
• Dean (S) [Member]
• Manager Administration [Member convener]

Responsibilities

• Campus security
• Security policy
• Interfacing with Chair, Council of Wardens

9.1.2 Campus Services & Beautification

• Appointed by Director [Chair]
• Nominated by Director (3) [Member]
• Manager Administration [Member]
• University Engineer [Member]

Responsibilities

• Campus services monitoring
• Ensuring cleanliness in general (including toilets)
• Beautification inside and outside buildings
• Landscaping

9.2 Institute Finance Committee

• Director [Chair]
• Finance Officer [Member Convener]
• Dean (A) [Member]
• Dean (R&D) [Member]
• Registrar [Member]
• Admin Officer [Member]
• Manager Finance [Member]

Responsibilities

• Prepare budget
• Financial planning
• Major capital works

9.3 Engineering & Construction

9.3.1 Building Works Committee

• Appointed by Director [Chair]
• Nominated by Director (3) [Member]
• University Engineer [Member Convener]

Responsibilities

• Master plan
• Planning of new buildings & forwarding to Director for approval
• Monitoring of construction for quality & timeliness
• Identification of “Official User” for every construction

9.3.2 Maintenance Wing
• Manager Admin [Coordinator]

Responsibilities
• Maintain buildings

9.4 Estate

9.4.1 Space Allocation Committee
• Appointed by Director [Chair]
• Nominated by Director (3) [Member]
• University Engineer [Member Convener]

Responsibilities
• Receive request for space in academic area
• Space allocation in academic area & forwarding of recommendation to Director

9.4.2 Quarter Allocation Committee
• Appointed by Director [Chair and Convener]
• Nominated by Director (2) [Member]
• Manager Administration [Member]

Responsibilities
• Policy for quarter allocation
• Receive request for quarter allocation & decide
• Work with residents association regarding any issue

Other related committees are Council of Wardens for hostel space, Campus Services & Beautification Committee for open areas.

9.5 Staff Committee
• Registrar [Chair]
• Admin Officer [Member Convener]
• Head, HV Cell [Member]
• Nominated by Director (2) [Member]

Responsibilities
• Staff issues
• Recruitment
• Training
• Appraisal
• Promotions
9.6 Emergency Medical Committee

- Registrar [Chair]
- Nominated by Director [Member]
- Manager Admin [Member Convener]

Responsibilities

- Taking decisions regarding requests for medical support

9.7 Endowments Committee

- Appointed by Director [Chair]
- Nominated by Director [Member]

Responsibilities

- Overall guidelines regarding expenses
- Liason with finance to determine interest, income etc.
- To oversee that individual endowments are following their respective guidelines and objectives

9.7.1 Specific Endowment Group

(One for each endowment)

- Chair Endowments Committee [Chair]
- All members of Endowments Committee [Member]
- Concerned member for the specific endowment [Member Convener]

Responsibilities

- Approval of expenditure (if more than prescribed limit)
- Oversee that expenditure is as per goals of the specific endowment

9.8 Gender Committee

- Appointed by Director [Chair]
- Nominated by Director (2-3) [Member]

Responsibilities

- Look into gender sensitivity in the campus and Institute community.
- Preliminary investigation of gender related complaints
- Award punishment in case of simple student misdemeanors (if punishment warranted is less than or equal to 2-weeks of suspension)
- Transfer more serious complaints regarding students to Student Disciplinary Committee
- Transfer complaints regarding staff (if considered genuine) to Registrar
- Transfer complaints regarding faculty (if considered genuine) to Director
Leave Rules

A) Non teaching Staff of the Institute

Casual leave: Staff members are eligible to avail 12 days casual leave in a year. The unutilized leave will automatically lapse at the end of the year. Calendar year is taken as administrative unit.

Service leave: 30 days of service leave in a year can be availed. The unutilized leave will be carried over to next year. Calendar year is taken as administrative unit.

Leave of absence: Leave can be availed in absence of service leave with adequate reasons. Such leave will be sanctioned on loss of pay.

Note: Casual leave and Service leave cannot be clubbed together.

Operation procedure:
1) Staff member shall make an application for any leave to Registrar and send it through their reporting officer.
2) After the approval of Registrar, the leave application will be sent to Personnel wing for maintaining the leave account of individual staff member.

B) Regular Faculty:

Casual leave: Faculty members are eligible to avail 12 days casual leave in a year. The unutilized leave will automatically lapse at the end of the year. Calendar year is taken as administrative unit.

Vacation leave: Vacation leave is at the rate of 30 days per year. Academic year is taken as administrative unit.

Service leave: Unutilized vacation leave can be converted into service leave at half the value. The service leave will be carried over to next year. Academic year is taken as administrative unit.

Leave of absence: Leave can be availed in absence of service leave with adequate reasons. Such leave will be sanctioned on loss of pay.

Note: Casual leave and Service leave cannot be clubbed together.

C) Visiting Faculty and Professor of Eminence

Vacation Leave / Service Leave: The Visiting faculty and Professor of Eminence are allowed for 30 days Vacation Leave per year. The unutilized vacation leave will be converted into service leave at half the value at the end of the year. The service leave will be carried over to next year.

Leave of absence: Leave can be availed in absence of service leave with adequate reasons. Such leave will be sanctioned on loss of pay.

Note: Casual leave and Service leave cannot be clubbed together.
**Operation procedure:**

1) Faculty member shall make an application for any leave to the Director.

2) After the approval of Director, the leave application will be sent to Personnel wing for maintaining the leave account.

**D) Senior Lecturers / Temporary faculty (3 courses per semester)**

*Casual leave:* Faculty members are eligible to avail 12 days casual leave in a year. The unutilized leave will automatically lapse at the end of the year. Calendar year is taken as administrative unit.

*Vacation leave:* Vacation leave is at the rate of 60 days per year. Academic year is taken as administrative unit.

*Service leave:* Unutilized vacation leave can be converted into service leave at half the value. The service leave will be carried over to next year. Academic year is taken as administrative unit.

*Leave of absence:* Leave can be availed in absence of service leave with adequate reasons. Such leave will be sanctioned on loss of pay.

**Note:** Casual leave and Service leave cannot be clubbed together.

**E) Lecturers/Research Lecturers**

Lecturers and Research Lecturers are eligible to avail 30 days Leave in a year.

*Leave of absence:* Leave can be availed in absence of the above leave with adequate reasons. Such leave will be sanctioned on loss of pay.

**Operation procedure:**

1) Lecturer / Research Lecturer shall make an application for leave to Director and send it through Ph.D guide.

2) After the approval of Director, the leave application will be sent to Personnel wing for maintaining the leave account.

**F) Institute Full Fellowship (MS/PhD Students)**

RA’s Working in Research centre are eligible to avail 21 days leave in a year subject to supervisor’s approval.

*Leave of absence:* Leave can be availed in absence of the above leave with adequate reasons. Such leave will be sanctioned on loss of pay.

**Semester-off for MS/PhD students**

1) MS/PhD students can be given semester-off after their coursework is completed. The students have to apply for each semester for a leave. The maximum duration of the programme remains same and off semesters do not count towards minimum residency requirements.
2) The student need not register during their absence and student status fee need not be paid.

3) However, the student should register for the semester in which he/she is getting the degree.

**G) Research Centre staff with the following designations**

i. System Scientist / System Engineer / Research Scientist / Research Engineer

ii. Research Associate / Post Docs

iii. Senior System Scientist / Senior System Engineer / Senior Research Scientist / Senior Research Engineer

iv. Senior Research Associate / Senior Post docs

v. Prl system Scientist / Prl Systems Engineer / Prl Research Scientist / Prl Research Engineer

The eligible leaves are given below:

**Casual Leave:** 12 days in a year from January – December.

**Other Leave:** 2 ½ day for every completed one month service, which will be accumulated.

**Leave of absence:** Leave can be availed in absence of the above leave with adequate reasons. Such leave will be sanctioned on loss of pay.

RC Head / PI is authorized to sanction both the leaves. After the approval, the leave application will be sent to personnel wing for maintaining leave account.

**H) Project & Technical Staff / Project Engineer / Technology Manager / Consultant / Programme Manager**

The research centre staff with the above designations is eligible for the following leaves.

**Casual Leave:** 12 days in a year from January – December.

**Other Leave:** 1 ½ day for every completed one month service, which will be accumulated.

**Leave of absence:** Leave can be availed in absence of the above leave with adequate reasons. Such leave will be sanctioned on loss of pay.

RC Head / PI is authorized to sanction both the leaves. Admin. Assistant working in the RCs will maintain the record of CL/OL account of Research Staff.

**I) Project Administrative Assistant**

The Project Administrative Assistant is eligible for the following leaves.

**Casual Leave:** 12 days in a year from January – December.

**Other Leave:** 1 ½ day for every completed one month service, which will be accumulated.

**Leave of absence:** Leave can be availed in absence of the above leave with adequate reasons. Such leave will be sanctioned on loss of pay.

RC Head / PI is authorized to sanction both the leaves. Admin. Assistant working in the RCs will maintain the record of CL/OL account of Research Staff.
**Maternity / Paternity Leave Rules for Regular Faculty / Non teaching Staff**

**Maternity Leave Rules**

This is applicable to regular women employees who have worked at least for 60 days before the expected date of delivery, during the preceding 12 months.

A woman employee with less than two surviving children may be granted maternity leave for a period of 90 days from the date of its commitment.

During such period, she shall be paid leave salary equal to the pay drawn immediately before proceeding on leave.

It is essential to get the leave sanctioned at least 15 days before proceeding on Maternity Leave.

After availing Maternity Leave and at the time of resuming duty, the employee must bring with her a fitness certificate and submit the same to the office.

Maternity Leave may be combined with leave of any other kind.

Maternity leave not exceeding 30 days may also be granted to a female employee (irrespective of the number of surviving children) during the entire period of service, incase of miscarriage, including abortion on production of medical certificate.

**Paternity Leave Rules**

A regular male employee with less than two surviving children may be granted Paternity Leave for period of (7) days during the confinement of his wife for child birth.

Paternity leave can be availed any time from the date of expected delivery to one week from the date of delivery.

Paternity Leave is a paid leave (leave with salary)

Any holiday / weekly off, if prefixed or suffixed, or both, with Paternity Leave, will not be counted as leave. However, any intervening holiday during the Paternity Leave period, shall be treated as part of leave availed.

Paternity leave may be combined with any other kind of leave.
Service Leave Encashment

a. Service Leave encashment limit to the faculty

The service leave encashment for faculty at the time of superannuation is 240 days. Further there would be caps based on years of service.

<table>
<thead>
<tr>
<th>Years of Service</th>
<th>Encashment Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 years</td>
<td>No encashment</td>
</tr>
<tr>
<td>5+ - 10 years</td>
<td>50 days</td>
</tr>
<tr>
<td>10+ - 15 years</td>
<td>110 days</td>
</tr>
<tr>
<td>15+ - 20 years</td>
<td>180 days</td>
</tr>
<tr>
<td>20+ years</td>
<td>240 days</td>
</tr>
</tbody>
</table>

b. Service Leave encashment limit to the staff at the time of superannuation.

The authority competent to sanction leave should automatically grant lump sum cash equivalent of leave salary admissible for the number of days of earned leave at the credit of the employee on the last day of his service, subject to a maximum of 300 days –

1. On retirement after attaining the age of superannuation;
2. When the service is extended in public interest beyond superannuation, after extension;
3. When an employee retires on superannuation while under suspension or while disciplinary or criminal proceedings are pending against him, the whole or part of cash equivalent of leave salary may be withheld to meet recoveries from him possibly arising on conclusion of the proceedings. On conclusion of the proceedings, payment may be released after adjustment of dues, if any;
4. On termination of service by notice/payment of pay and allowances in lieu of notice or otherwise in accordance with the terms and conditions of his appointment;
5. On termination of service of officials re-employed after retirement. In this case, the maximum will include the period for which encashment of leave was allowed at the time of previous retirement.
6. When an employee is invalidated from service on medical grounds;
7. When an employee resigns or quits service on his own accord, the lump sum cash payment will be only to the extent of half of the earned leave at his credit subject to a maximum of 150 days on the date of cessation from service.

c. Surrender and Encashment of Service Leave by the non-teaching staff members

The regular non-teaching staff members of the Institute are permitted to surrender and encash the service leave for 15 days per annum or 30 days in a block of 2 years. There should be a minimum balance of 45 days in a staff member’s account before they claim for encashment.

Retirement Age

- The retirement age of regular faculty is 68 years effective from 1.1.2009.
- The retirement age of Non-teaching staff is 60 years.
**Leave Travel Allowance Rules**

**Leave Travel Allowance**

Leave Travel Allowance is a fixed allowance as part of the pay.

**Mode of payment**

Financial year will be taken as a unit for payment of LTA. The LTA will be paid in the month of April for the financial year ending with March. So, there is no need to apply for LTA.

If an employee is on leave for some period (excluding casual leave and service or vacation leave) during the financial year, a deduction in proportion to the leave of absence will be made.

If any employee joins in the middle of financial year, a proportional amount of LTA will be paid.

**Tax Exemption Status**

Fixed allowance paid to an employee by way of LTA on basis of self-declaration is not exempt under Section 10(5) of Income Tax Act. If an employee does not wish to claim tax exemption he need not do anything and need not read any further.

For those who want to claim tax exemption for the full or part of LTA, actual journey must be performed and proof must be given as outlined below.

**Family**

For the purpose of section 10(5) “family” in relation to an individual means the spouse and children of the individual, parents, brothers and sisters of the individual who are wholly or mainly dependent on him/her. A Family declaration needs to be given by the employee.

**Mode of Travel**

Air, Rail or any other mode of transport from headquarters to a specified place and back.

Where journey is performed by air, amount of air economy fare of the National carrier by the shortest route or the amount spent, whichever is less.

Where journey is performed by rail, amount of air-conditioned first class rail fare by the shortest route or amount spent, whichever is less.

Where a recognized public transport exists, first class or deluxe class fare by the shortest route or the amount spent whichever is less.

**Exemption is based upon actual expenditure:** The quantum of exemption is limited to the actual expenses incurred on the journey. In other words, without performing any journey and incurring expenses thereon, no exemption can be claimed.
**Exemption is available in respect of fare**: The exemption is strictly limited to expenses on air fare, rail fare, bus fare only. No other expenses, like scooter charges at both ends, porterage expenses during the journey and lodging / boarding expenses will qualify for exemption.

**Exemption is available in respect of shortest route**: Where the journey is performed by a circuitous route, the exemption is limited to what is admissible by the shortest route. Likewise, where the journey is performed in a circular form touching different places, the exemption will be limited to what is admissible for the journey from the place of origin to the farthest point reached, by the shortest route.

Only 2 journeys in a block of 4 years is exempt i.e., for the block period 2002-2005 (January 1, 2002 to December 31, 2005)
<table>
<thead>
<tr>
<th>SI No.</th>
<th>Room Rent</th>
<th>Local Conveyance</th>
<th>D.A.</th>
<th>Mode of Travel</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Director</td>
<td>Actuals (Supported by Bills)</td>
<td>Self Claim</td>
<td>500 per day</td>
</tr>
<tr>
<td>2</td>
<td>Faculty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Bombay, Delhi, Calcutta, Chennai, Bangalore</td>
<td>As per bills subject to a ceiling of Rs. 4000</td>
<td>Self Claim</td>
<td>400 per day</td>
<td>Overnight travel II AC</td>
</tr>
<tr>
<td>b) Cities other than (a)</td>
<td>As per bills subject to a ceiling of Rs. 3000</td>
<td>Self Claim</td>
<td>300 per day</td>
<td>Air beyond overnight</td>
</tr>
<tr>
<td>3</td>
<td>Staff Members</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.a</td>
<td>Senior Staff *</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Bombay, Delhi, Calcutta, Chennai, Bangalore</td>
<td>As per bills subject to a ceiling of Rs.3000</td>
<td>Self Claim</td>
<td>400 per day</td>
<td>Overnight travel II AC</td>
</tr>
<tr>
<td>b) Cities other than (a)</td>
<td>As per bills subject to a ceiling of Rs.2000</td>
<td>Self Claim</td>
<td>300 per day</td>
<td>Air beyond overnight</td>
</tr>
<tr>
<td>3.b</td>
<td>Junior Staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Bombay, Delhi, Calcutta, Chennai, Bangalore</td>
<td>As per bills subject to a ceiling of Rs.1500</td>
<td>Self Claim</td>
<td>250 per day</td>
<td>III AC/I Class</td>
</tr>
<tr>
<td>b) Cities other than (a)</td>
<td>As per bills subject to a ceiling of Rs.900</td>
<td>Self Claim</td>
<td>150 per day</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Research Staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.a</td>
<td>Senior Research Staff **</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Bombay, Delhi, Calcutta, Chennai, Bangalore</td>
<td>As per bills subject to a ceiling of Rs.3000</td>
<td>Self Claim</td>
<td>400 per day</td>
<td>Overnight travel II AC</td>
</tr>
<tr>
<td>b) Cities other than (a)</td>
<td>As per bills subject to a ceiling of Rs.2000</td>
<td>Self Claim</td>
<td>300 per day</td>
<td>Air beyond overnight</td>
</tr>
<tr>
<td>4.b</td>
<td>Junior Research Staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Bombay, Delhi, Calcutta, Chennai, Bangalore</td>
<td>As per bills subject to a ceiling of Rs.1500</td>
<td>Self Claim</td>
<td>250 per day</td>
<td>III AC/I Class</td>
</tr>
<tr>
<td>b) Cities other than (a)</td>
<td>As per bills subject to a ceiling of Rs.900</td>
<td>Self Claim</td>
<td>150 per day</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Bombay, Delhi, Calcutta, Chennai, Bangalore</td>
<td>As per bills subject to a ceiling of Rs 900</td>
<td>Self Claim</td>
<td>150 per day</td>
<td>II Sleeper</td>
</tr>
<tr>
<td>b) Cities other than (a)</td>
<td>As per bills subject to a ceiling of Rs.600</td>
<td>Self Claim</td>
<td>125 per day</td>
<td></td>
</tr>
</tbody>
</table>

Note:
1. Director is entitled for official entertainment
2. Faculty is entitled for official entertainment with the approval of the Director and as per the bills
3. Overnight travel is defined as places such as Pune, B’lore, Chennai, Visakhapatnam which are conveniently connected by overnight trains. In case of urgency instead of train, air travel may be performed after taking Director’s approval.

4. In case of external project funds, the air travel may be performed after taking approval from the Prl. Investigator of the project or Head of Research Center.

5. Local calls are covered under daily allowance. Any STD/ISTD are allowed with the approval of Director as per the bills.

6. Tour approval shall be obtained. If advance is needed, the relevant column in the tour approval form shall be filled in.

7. For official journeys cancelled in public interest, cancellation and reservation charges are reimbursable.

8. A second advance will not be sanctioned unless the first advance is settled.

9. After completing the travel the employee needs to submit his/her tour claim in the prescribed form within 15 days.

10. In case of not claiming room rent, 30% extra DA shall be paid over the normal rate of DA.

11. Rates for all foreign travel will be Economy Class air fare.

12. In case of official local travel by the staff members within Hyderabad, the DA admissible is Rs. 200 per day and conveyance on actuals.

13. Research Students at Stage L2 or higher, are treated equivalent to Junior Research Staff for purposes of travel.

14. In case of externally funded projects, Principal Investigators of the project can sanction a higher class of travel upto Senior Research Staff depending on need;

15. Director may approve a higher class of travel for any of the categories depending on need.

* Senior Staff means Managers and above cadre

** Sr. Research Staff means Prl. Research Scientists/Sr. Research Scientists etc.

+ Local Transport by Auto for staff and taxi for faculty.
# D.A. rates for Foreign Travel

<table>
<thead>
<tr>
<th>Category A</th>
<th>Category B</th>
<th>Category C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name of the country</strong></td>
<td><strong>Kazakhstan</strong></td>
<td><strong>Mauritania</strong></td>
</tr>
<tr>
<td>Afghanistan</td>
<td>Algeria</td>
<td>Kyrgyzstan</td>
</tr>
<tr>
<td>Austria</td>
<td>Angola</td>
<td>Latvia</td>
</tr>
<tr>
<td>Belgium</td>
<td>Azerbaijan</td>
<td>Martinique</td>
</tr>
<tr>
<td>Brunei</td>
<td>Aruba</td>
<td>Macedonia</td>
</tr>
<tr>
<td>Canada</td>
<td>Barbados</td>
<td>Mexico</td>
</tr>
<tr>
<td>China</td>
<td>Belarus</td>
<td>Moldeva</td>
</tr>
<tr>
<td>Cyprus</td>
<td>Bermuda</td>
<td>Montserrat</td>
</tr>
<tr>
<td>Denmark</td>
<td>Bolivia</td>
<td>Namibia</td>
</tr>
<tr>
<td>Fiji</td>
<td>Botswana</td>
<td>Nether Antille</td>
</tr>
<tr>
<td>Finland</td>
<td>Bosnia Herzegovina</td>
<td>Nicaragua</td>
</tr>
<tr>
<td>France</td>
<td>Brazil</td>
<td>Oman</td>
</tr>
<tr>
<td>Germany</td>
<td>Bulgaria</td>
<td>Pacific Islands</td>
</tr>
<tr>
<td>Gibraltar</td>
<td>Chile</td>
<td>Panama</td>
</tr>
<tr>
<td>Greece</td>
<td>Colombia</td>
<td>Paraguay</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>Costa Rica</td>
<td>Puerto Rico</td>
</tr>
<tr>
<td>Holy See (Vietnam)</td>
<td>Croatia</td>
<td>Peru</td>
</tr>
<tr>
<td>Iceland</td>
<td>Cuba</td>
<td>Philippines</td>
</tr>
<tr>
<td>Ireland</td>
<td>Czeeh Republic</td>
<td>Poland</td>
</tr>
<tr>
<td>Italy</td>
<td>Dominica</td>
<td>Qatar</td>
</tr>
<tr>
<td>Japan</td>
<td>Dominican Rep.</td>
<td>Republic of Palau</td>
</tr>
<tr>
<td>Korea (South)</td>
<td>Ecuador</td>
<td>Saudi Arabia</td>
</tr>
<tr>
<td>Lithuania</td>
<td>Egypt</td>
<td>Seychelles</td>
</tr>
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<td>Luxembourg</td>
<td>Egypt</td>
<td>Singapore</td>
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<tr>
<td>Malta</td>
<td>El Salvador</td>
<td>Slovok Republic</td>
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<tr>
<td>Micronesia</td>
<td>Estonia</td>
<td>South Africa</td>
</tr>
<tr>
<td>Netherland</td>
<td>Gaza (PNA)</td>
<td>Suriname</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Georgia</td>
<td>Syria</td>
</tr>
<tr>
<td>Norway</td>
<td>Grenada</td>
<td>Tajakhstan</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>Gundeloupe</td>
<td>Thailand</td>
</tr>
<tr>
<td>Principality of Lichtenstein</td>
<td>Guatemala</td>
<td>Trinidad &amp; Tobago</td>
</tr>
<tr>
<td>Portugal</td>
<td>Guyana</td>
<td>Turkmenistan</td>
</tr>
<tr>
<td>Republic of Slovenia</td>
<td>Haiti</td>
<td>Turks &amp; Caicos</td>
</tr>
<tr>
<td>Republic of San Marino</td>
<td>Honduras</td>
<td>U.A.E.</td>
</tr>
<tr>
<td>Romania</td>
<td>Hungary</td>
<td>Russian Federation</td>
</tr>
<tr>
<td>Category A</td>
<td>Category B</td>
<td>Kazakhstan</td>
</tr>
<tr>
<td>------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>Spain</td>
<td>Indonesia</td>
<td>Ukraine</td>
</tr>
<tr>
<td>Sweden</td>
<td>Iran</td>
<td>Uruguay</td>
</tr>
<tr>
<td>Switzerland</td>
<td>Iraq</td>
<td>Uzbekistan</td>
</tr>
<tr>
<td>Turkey</td>
<td>Israel</td>
<td>Vanuatu</td>
</tr>
<tr>
<td>U.K</td>
<td>Jamaica</td>
<td>Venezuela</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>Kampuchea (Cambodia)</td>
<td>Yugoslavia</td>
</tr>
</tbody>
</table>

**Note:**
1. The DA rates for foreign tour are:

<table>
<thead>
<tr>
<th>Category</th>
<th>DA in US $</th>
<th>DA in US $</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>75</td>
<td>50</td>
</tr>
<tr>
<td>B</td>
<td>55</td>
<td>40</td>
</tr>
<tr>
<td>C</td>
<td>45</td>
<td>30</td>
</tr>
</tbody>
</table>

2. Accommodation charges will be given on actual basis with an upper limit as shown below:

<table>
<thead>
<tr>
<th>Category</th>
<th>Faculty &amp; Staff</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>B</td>
<td>150</td>
<td>75</td>
</tr>
<tr>
<td>C</td>
<td>120</td>
<td>50</td>
</tr>
</tbody>
</table>

In case no accommodation charges are claimed, DA rates goes up by 20%

3. Local Conveyance - Actuals with supporting bills

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**Policy for Institute Support for Conference Travel**

Note that this is valid only if the faculty member seeks general Institute support for travel. If you fund your conference travel with research center funds, none of these policies apply.

**Support for Conference Travel and Registration**

**Conferences held within India**

The Institute will support an amount of Rs. 7,500/- per faculty per year towards registration fee, travel, stay etc. Any additional cost has to be met from the Research Centre funds. In case if
the amount is not utilized, it will be carried forward for one year only. After which the amount will lapse. Sanctioning authority for expense will be self.

There will be an Institute Travel Fund Committee that will meet periodically to handle all such travel requests. The committee will recommend for sanction of conference support based on the points A, B, C and D given below.

Conferences held outside India

If a faculty member has a paper in a conference outside India, following points will be considered:

A. Quality of the conference: In each area there are at most 3-4 top quality conferences that are considered to be the best places to get maximum visibility for the research work to be presented. One criterion for top-quality conference is that most of the top researchers working in that area attend the conference. The conference has to be international (ACM, IEEE, AAAI), or European, or Pacific-Asian. Individual national conferences in other countries (e.g., BNCOD) will not be considered.

B. Type of the paper: Regular research papers will be given highest value, followed by research poster papers, applications papers, application poster paper, research demonstrations, and industrial papers.

C. Location of the conference: If it is within Asia, Australia, Europe, North America and South America, the travel costs are proportional to the distance of the conference location from India.

D. Contributors of the paper: Student contributed papers are valued more than just faculty-only paper. All IIIT contributors are valued more than having non-IIIT contributors. In case there are non-IIIT contributors, then appropriate sharing of cost has to take place.

The above points will be used to prioritize the requests for institute travel money. Based on the above points following rules will be applied:

a) For class A and Class B conferences, the Institute will support an amount of Rs. 1.50 lakhs towards registration fee, travel, stay etc during the entire period of service of a faculty member. This should be viewed as seed support, and the faculty members should generate their own travel funds through research center funds or funded projects.

b) Papers published but not going abroad:
   i) For Class A conferences, faculty has to bear 10% of personal money towards registration fee;
   ii) For Class B conferences, faculty has to bear 20% of personal money towards registration fee;
   iii) The Institute will support an amount of Rs. 30,000/- during the entire period of service of a faculty member

Partial list of top-quality international conferences is given in Annexure
Policy on “Conferences held in India” to be effective from this financial year.
Policy on “Conferences held abroad” to be effective with retrospective effect (from date of joining of faculty member)
Amendment

The following amendment is made in the Academic-Admin. Committee meeting held on 15.10.2004, regarding Institute support for Conference travel by the faculty members.

Conferences held within India:

The limit of Institute support per faculty per year towards registration fee, travel, stay etc., has been enhanced from Rs. 5000/- to Rs. 7500/-. The sanctioning authority for such travel will be by “Self”. No need for approval of Director.

In case, if the amount is not utilized, it will be carried forward for one year only. After which the amount will lapse.

Conferences outside India:

Institute Travel Fund Committee with following faculty members is formed. Faculty members have to forward their travel proposals to the committee, for recommendations, which in turn, forwarded to Director for approval.

Travel Fund Committee:
1) Dr. P.J. Narayanan

Relocation Policy

Relocation charges for the employees joining IIIT, Hyderabad

The following decision is taken in the Academic-Admin. Committee meeting held on 20-5-2003 on relocation charges for the employees joining the Institute.

a) Economy class Airfare / AC Sleeper (within India) from the place of stay to Hyderabad, India for self and family.

b) Freight charges limited to Rs. 75,000/- (from outside country)

c) Freight charges limited to Rs. 25,000/- (within the country)

This order will come into operation with immediate effect for those, for whom relocation charges are granted.
Transport charges for Technical tours

Whenever technical tours for the students are organized by the Institute, it is decided to meet the transportation charges by the Institute as well as by the students at the ratio of 50:50.