

Courses of Study

Academics Handbook

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Addendum: List of Modifications to the Handbook

Updated on 1st August, 2021 (till 44th Senate)

1. INTRODUCTION

1.1 Background

Inventions and innovations are keywords on which the foundation of IIT Hyderabad is based. These are also key drivers for the vision of IIT Hyderabad. Our endeavour is to create an institute that will provide a space for free and uninhibited thinking, a space where faculty and students can experiment with novel ideas without the fear of failure. It is our firm belief that such an ambience will foster the highest level of research: blue sky research as well as developmental research leading to proof of concepts and prototypes.

1.2 Departments

The Institute is organised into the following departments:

Department	Abbreviation	Course prefix
Department of Artificial Intelligence	AI	AI
Department of Biomedical Engineering	BM	BM
Department of Biotechnology	BO	BO
Department of Chemical Engineering	CHE	CH
Department of Chemistry	CY	CY
Department of Civil Engineering	CE	CE
Department of Climate Change	CC	CC
Department of Computer Science and Engineering	CSE	CS
Department of Design	DS	DS
Department of Electrical Engineering	EE	EE
Department of Entrepreneurship & Management	EM	EM
Department of Engineering Science	ES	ES
Department of Liberal Arts	LA	LA/CA
Department of Materials Science and Metallurgical Engineering	MSME	MS
Department of Mathematics	MA	MA
Department of Mechanical & Aerospace Engineering	MAE	ME/AE
Department of Physics	PH	PH/EP

Amongst the above, some of the departments like the Department of Artificial Intelligence, the Department of Climate Change and the Department of Engineering Science are interdisciplinary departments, meaning they are comprised of adjunct faculty from multiple departments.

1.3 Programs offered

Currently, the Institute is running the following Degree Programs:

- Undergraduate
 - Bachelor of Design (BDes)
 - Bachelor of Technology (BTech)
 - Master of Arts (MA)
 - Master of Science (MSc)
- Postgraduate
 - Master of Design (MDes)
 - Master of Technology (MTech): 2-Year & 3-Year
- PhD
- Multiple degree programs

1.3.1 Bachelor of Design (BDes)

Department	Program
Design	Bachelor in Design

1.3.2 Bachelor of Technology (BTech)

Department	Program
Artificial Intelligence	BTech in Artificial Intelligence
Biomedical Engineering	BTech in Biomedical Engineering
Biotechnology	BTech in Biotechnology & Bioinformatics
Chemical Engineering	BTech in Chemical Engineering
Civil Engineering	BTech in Civil Engineering
Computer Science and Engineering	BTech in Computer Science and Engineering
Electrical Engineering	BTech in Electrical Engineering
Engineering Science	BTech in Engineering Science
Materials Science & Metallurgical Engg.	BTech in Materials Science & Metallurgical Engineering
Mathematics	BTech in Mathematics and Computing
Mechanical & Aerospace Engineering	BTech in Mechanical Engineering
Physics	BTech in Engineering Physics

1.3.3 Interdisciplinary Bachelor of Technology

Particulars	Program
Interdisciplinary	BTech in Computational Engineering

1.3.4 Master of Arts (MA)

Department	Program
Liberal Arts	MA in Development Studies

1.3.5 Master of Science (MSc)

Department	Program
Chemistry	MSc in Chemistry
Mathematics	MSc in Mathematics / Mathematics and Computing
Physics	MSc in Physics

1.3.6 Master of Design (MDes): 2-Year & 3-Year

Department	Program
Design	Master of Design

1.3.7 Master of Technology (MTech): 2-Year & 3-Year

Department	Program		
Artificial Intelligence	MTech in Artificial Intelligence		
Biomedical Engineering	MTech in Biomedical Engineering	Nanomedicine & Biomaterials (NBM)	
		Medical sensing, analytics & simulation (MedSAS)	
Biotechnology	MTech in Medical Biotechnology		
Chemical Engineering	MTech in Chemical Engineering		
Civil Engineering	MTech in Civil Engineering	Environmental Engineering	
		Geotechnical Engineering	
		Structural Engineering	
		Hydraulics & Water Resources Engineering	

Climate Change	MTech in Climate Change	
Computer Science and Engineering	MTech in Computer Science and Engineering	Computer Science and Engineering
		Network and Information Security
	Executive MTech in Data Science	
Electrical Engineering	MTech in Electrical Engineering	Communications and Signal Processing (CSP)
		Microelectronics (Micro) and VLSI
		Power Electronics and Power Systems (PEPS)
		Systems & Control (SysCon)
Materials Science & Metallurgical Engineering	MTech in Materials Science & Metallurgical Engineering	
Mechanical & Aerospace Engineering	MTech in Mechanical Engineering	Integrated Design and Manufacturing
		Mechanics & Design
		Thermo-Fluids
	MTech in Aerospace Engineering	

1.3.8 Interdisciplinary MTech Programs:

1. Additive Manufacturing
2. Energy Science and Technology
3. E-Waste Resource and Engineering Management
4. Integrated Sensor System
5. Medical Device Innovation
6. Polymers and Biosystems Engineering
7. Smart Mobility
8. Integrated Computational Materials Engineering (online)
9. Electrical Vehicle Technology (online)

1.3.9 Online MTech & MDes Programs:

MTech:

1. Integrated Computational Materials Engineering (ICME)
2. Computational Mechanics
3. Communication and Signals Processing (CSP)
4. Power Electronics and Power System (PEPS)
5. Microelectronics and VLSI (ME & VLSI)
6. Industrial Metallurgy
7. Electrical Vehicle Technology

MDes:

1. MDes by Practice

1.3.10 Doctor of Philosophy (PhD)

Most of the departments offer the Ph.D. program in their respective departments. IITH also has joint PhD programs with some reputed universities. Students may visit the IITH admissions page for more information.

1.3.11 Interdisciplinary Ph.D. Programs

- The Institute proposes the beginning of an interdisciplinary PhD program from the Centre for Interdisciplinary Program (CIP).

- In principle any two faculty from two different disciplines can propose a PhD project.
- The proposals will be screened by an expert committee constituted by the Centre and eligible projects will be advertised for admission of interested PhD students.
- CIP MTech toppers will have a provision to convert to a PhD program under the Centre for interdisciplinary Programs with MoE fellowship.
- 10% of the total number of MTech students from all ID programs are also eligible to be converted to interdisciplinary PhDs as per existing rules.
- The number of CIP PhD student with MoE fellowship will be restricted to a maximum of one per faculty.
- CIP PhD allocation will be supernumerary to the department allocations.

The ID PhD Program involves rigorous course work (12 or 24 credits depending on the background of students) followed by research work in their chosen area leading to a doctoral thesis.

Duration: Five Years

Admission: The admission into this program is offered against specified research projects proposed jointly by the faculty members from two different departments (supervisors) based on an interview conducted by the ID PhD Admission Committee.

Research Areas:

- Healthcare
- Novel Materials & Techniques
- Artificial Intelligence & Machine Learning
- Energy, Environment & Creative Design

Eligibility: Candidates with

- Masters (MA/ME/MTech) or equivalent in any discipline OR
- BE/BTech or equivalent in any discipline with a valid GATE Score OR
- MSc or equivalent in any Science discipline with a valid GATE score or qualified in one of the national exams such as INSPIRE, Joint CSIR-UGC NET with JRF, DBT JRF.

1.3.12 Multiple Degree Programs

In addition to the above listed programs, there is also scope for students to convert to combination degree programs, like BTech+MTech, MTech+PhD, Double Major, BTech+MTech (interdisciplinary) etc.

1.4 Organizational Structures of Academics

The academic programs of the Institute are governed by Rules and Regulations approved by the Senate from time to time. The Senate is chaired by the Senate Chairman (Director of the Institute) and comprises various faculty of the Institute. The Dean of Academic Programs (Dean Academics) oversees the implementation of academic programs and handles all related matters. The Senate may also form various sub-committees from time to time for specific purposes such as SUGC and SPGC. Administrative support is provided by the Academic Office, with a Deputy Registrar (Acad) in charge, assisted by Assistant Registrars.

At the department level, the Head of the Department (HoD) together with DUGC (Department Under-Graduate Convener) and DPGC (Department Post-Graduate Convenor) oversee the academic progress of the students. They are aided by faculty advisors who are envisioned as the primary and first contact point of students for all academic matters. If on any academic matter a student would like to approach this administrative structure, it is suggested that he/she may do so through the HoD with advice and recommendations from Faculty Advisor and DUGC/DPGC.

1.4.1 Academic Advisory Committee (AAC)

Composition:

- Chairman - Prof. Saptarshi Majumdar
- Convener - Dr. GVV Sharma Members (First Committee for 03 years)

- Members - Prof. Vinayak Eswaran · Prof. N. Venkata Reddy · Prof. Bheemarjuna Reddy Tamma · Dr. M V Panduranga Rao · Prof. Pinaki Prasad Bhattacharjee · Prof. Balasubramaniam Jayaram · Prof. Vinod M Janardhanan · Prof. Soumya Jana · Prof. Tarun Kanti Panda · Prof. Badri N. Rath · Prof. Umashankar B · Prof. Deepak John Mathew
- Secretary - Deputy Registrar (Academics)

AAC Landscape:

- Information and awareness
- Pedagogy and methods
- Policy and management

Objectives for the Next 03 years:

- Online Platforms & Tomorrow's Academics
- Digital Technologies for Internal & External Purposes
- Academic Awareness (Updated Handbook & other means)
- Uplifting Academic Ambience, Standard, Resources
- Student Stress Management; Faculty Development
- Fostering Creativity, Innovation & Motivation in academics
- GIAN/NPTEL Courses, Books by Faculty
- Academics & Ranking: Possibilities & Implementations
- Data Analytics: Benchmarks & Predictions
- Quantifying Academic Impact & Reward-Recognition
- Pedagogy: Methods, Applications & Possibilities
- ID Programs: UG & PG
- Industry Orientation in Academics
- Long Term Visions: Road Ahead & Methods; NEP 20: Policy & Implementations
- Visibility, Peer Perceptions & Outreach
- Any other related Academic affairs

1.4.2 Senate Post-Graduate Committee (SPGC)

This committee (SPGC) shall be reconstituted every year, and shall include a Chairperson, the convenors of Department Post-graduate Committees (DPGCs) of each of the academic departments and the retiring SPGC Chairperson, as well as two students each from the Ph.D and Masters programs nominated by the Students' Gymkhana.

The Post-graduate committee shall have jurisdiction in all academic matters concerning the post-graduate (including M.Sc.-PhD Dual Degree) programs of the Institute, including inter-alia, the formal approval or modification of courses, fixation of their credit value, the admission of post-graduate students and their appointment as research scholars and fellows, determination of the satisfactory meeting of degree requirements and to admission to candidacy for degrees, the terminations of students for inadequate academic performance, the grant of long leave for students, and the implementation of all rules governing the academic evaluation and monitoring of Post-graduate students, and other related matters as may be referred to it by the Senate. In the discharge of its responsibilities, the committee shall seek recommendations of the concerned DPGCs, but will aim for a uniform application of the rules approved by the Senate. In its capacity of a senate sub-committee, the SPGC can only make recommendations on each of these matters over which the Senate shall retain the power of final decision. The recommendations of the SPGC will be communicated to concerned students and Departments, so that they may appeal or raise the issues in the Senate meeting when the SPGC recommendations will be discussed. Each academic department shall have a Departmental Post-Graduate Committee (DPGC) consisting of a Convenor, HoD and 2 or more faculty members as required by the department. The DPGC must also have one student each from the Ph.D and the Masters programs, chosen for one year by the respective students of the department. The tenure of the faculty shall be two years, half of them retiring each year. The student members shall not participate in the academic evaluation of individual students, although their opinion may be sought prior to any decision on the latter.

The Chairman of the SPGC will be chosen from among the SPGC members by themselves. The chairman must be a senate member.

1.4.3 Senate Under-Graduate Committee (SUGC)

This committee (SUGC) shall include a Chairperson, the convenors of Department Undergraduate Committees (DUGCs) of each of the academic departments offering undergraduate degrees and the retiring SUGC Chairperson, as well as 5 students, one student from each year the of B.Tech and one from 5th year dual degree, nominated by the Students' Gymkhana.

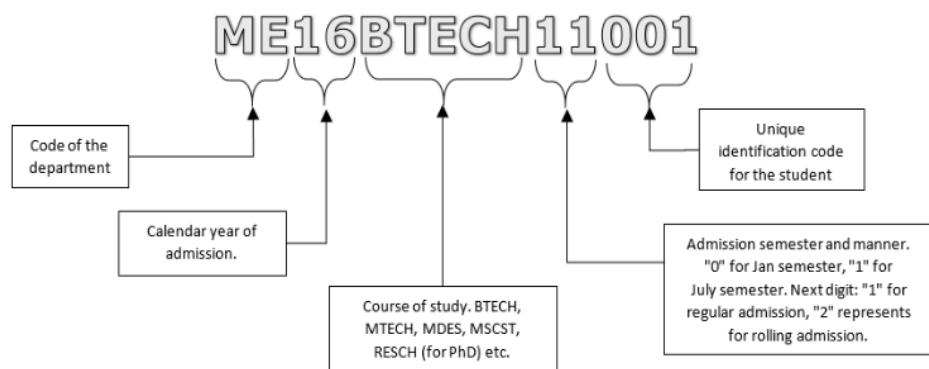
The SUGC shall have jurisdiction in all academic matters concerning the under-graduate programs of the Institute, including inter-alia, the formal approval or modification of courses, fixation of their credit value, the formal approval of admission of first year students, determination of the satisfactory meeting of degree requirements, the granting of degrees, the conduct of examinations, and evaluation of academic performance, the terminations of students for inadequate academic performance, the grant of long leave for students, and the implementation of all rules governing the academic evaluation and monitoring of undergraduate students, and other related matters as may be referred to it by the Senate. In the discharge of its responsibilities, the committee shall seek recommendations of the concerned DUGCs, but will aim for a uniform application of the rules approved by the Senate. In its capacity as a senate sub-committee, the SUGC can only make recommendations on each of these matters over which the Senate shall retain the power of final decision. The recommendations of the SUGC will be communicated to concerned students and Departments, so that they may appeal or raise the issues in the Senate meeting when the SUGC recommendations are discussed.

Each academic department shall have a Departmental Under-Graduate Committee (DUGC) consisting of a Convenor, the Head of the Department, and four or more faculty members, and four students, from different years, of the undergraduate program, chosen for one year by the respective students of the department. The tenure of the faculty shall be two years, half of them retiring each year. The student members shall not participate in the academic evaluation of individual students, although their opinion may be sought prior to any decision on the latter.

The Chairman of the SUGC will be chosen from among the SUGC members by themselves. The chairman must be a senate member.

1.5 Roll Number Scheme

Each student is given a roll number at the time of admission into a program. This roll number will have to be used by the student consistently throughout his/her duration of studies at the Institute in that program. Students who joined under one program and have converted to another program (example: joined as BTech, later converted to BTech+MTech dual degree) will be assigned a separate roll number at the time of such conversion. This roll number is also the default email ID for the students in the form of <rollnumber@iith.ac.in>. The following is the denotation/meaning of the various parts of this roll number:



Further, from the Academic year 2020-21, the following Roll No. pattern is followed for PG & PhD programs:

PG Admission Session	PG Admission Category				
	Regular	IITH Project	Govt. LAB/PSU Sponsored	Self-Sponsored	International
January	01	02	-	-	-
July	11	12	13	14	16

Ph.D. Admission Session	Ph.D. Admission Category					
	Regular	Rolling	Govt. Sponsored (DRDO)	External / Industry Sponsored	QIP	International
January	01	02	03	04	05	06
July	11	12	13	14	15	16

1.6 Code of Conduct for Students

Students are expected to conduct themselves with integrity and proper consideration for others at all times. They are expected to exhibit proper respect for others in their personal behaviour and interpersonal interactions, both within and outside the campus. The Institute strictly prohibits ragging and sexual harassment; any instance of either should be reported immediately and will be dealt with as a serious offense. Students are expected to respect Institute property and follow all Institute rules and regulations at all times.

The student must also adhere to the hostel rules and regulations; details of the same can be found on the Gymkhana website: <http://gymkhana.iith.ac.in>

If students feel victimized by the conduct, academic or personal, of any other member of the Institute, they may register a complaint with statutory bodies such as the Women's Cell, SC/ST Cell and Grievance cell. Please see the section on mentoring & statutory support for students for more details.

1.7 Glossary of Terms

- *Additional Course:* An additional course taken by the student over and above the minimum credit requirements of the degree. The credits earned will be shown separately as additional and will not count towards CGPA.
- *Audit:* Additional course above the degree requirements which can be registered by the student. But no letter grade will be given; if successfully completed, only an "AU" grade will appear in the transcript. If not completed successfully, then the student will not be awarded any grade and the course will not be shown in the transcript.
- *Core Course:* A course which is considered fundamental or core for a stream and is compulsory to be registered by the student (offered by the same or a different department, but identified as "core" by one's department).
- *Credit:* The quantitative measure of recognition given to a course, stated in semester hours. Typically, a theory course running for a full semester with three contact hours per week would be 3 credits. Similarly, a lab course with the same number of contact hours would be 2 credits (3 credits Theory course has 42 lecture hours in a semester).
- *Departmental Elective:* Elective courses offered by student's "parent" department.
- *Double Major:* Coursework pertaining to two departments/disciplines and leading to a degree with two departments listed.
- *Elective:* Course chosen by the student and which would form part of his/her degree requirements.
- *Fractal Segment:* The part or duration of a semester in which a particular course is offered.

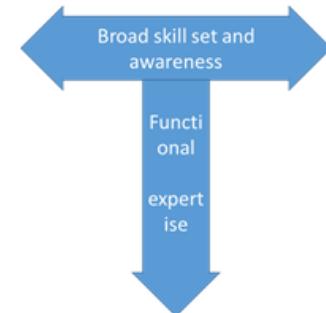
- *Free Elective*: A course of the student's choice, to be selected from any department (subject to meeting the pre-requisites).
- *Honors*: Additional basket of coursework done in the same discipline as the student's original discipline (and would also find mention in the final degree).
- *LA/CA Elective*: A course of the student's choice, to be selected from the Liberal Arts and Creative Arts category.
- *Major*: The primary set of discipline-specific coursework pertaining to the student's department/discipline.
- *Minor*: Additional basket of coursework done from a discipline different from the student's original/parent discipline (and would also find mention in the final degree).
- *Pre-requisite*: The preliminary requirement, usually successful completion of another course, that must be met before a course can be taken.
- *Self-study Course*: Any course where learning happens in a series of interactions, self-reading of text books, video lectures and regular exams instead of scheduled classes (typically meant for higher level courses offered in summer vacation).
- *Science Elective*: A prescribed set of courses to be selected from the Mathematics, Physics & Chemistry Departments.

2. FRACTAL ACADEMICS

Key Ingredients of an Effective Curriculum:

The following are a few points that can be said to be key ingredients needed for an effective curriculum:

- Program should capture both breadth and depth (T-model of education).
- Should foster interdisciplinary understanding
- It should be flexible enough to cater to the interests of different students.
- Should have a wider choice of electives
- Should foster research at the undergraduate level
- Should have synergy in projects – hopefully leading to products
- Should allow students can pace their program
- Create greater choice for knowledge acquisition and specialization
- Encourage creativity [Ex. Bouquet of courses in Creative Arts (music, movie making, fine arts)]



Fractal Academics at IITH

A fractal is a never-ending pattern that are self-similar across different scales. They are created by repeating a simple process over and over in an ongoing feedback loop. Fractals are easily found in nature; these objects display self-similar structure over an extended, but finite, scale range. Examples include clouds, snow flakes, mountains, river networks, cauliflower or broccoli, and systems of blood vessels.



Illustration of a fractal geometry at various levels

Fractal academics also follows such a multi-scale approach. In this, a subject is offered as a set of two courses: a 1-credit giving an overview of the subject and a higher level course (often 2-3 credits) giving functional expertise of the subject. For example, a student may enrol for introductory parts of say, Digital Signal Processing, IC Engines and Machine Learning. S/he will thus gain a broad understanding on these wide range of topics. Subsequently, based on the interest of the student, one may also enrol for the advanced version of one of those courses for a deeper grip of the subject. This model, thus makes it possible for both breadth and depth in learning. It may be noted that both the introductory and the advanced courses attempt to cover the same range of topics, but in varying degree of details, hence, the name fractal academics.

This was a result of initial attempts at IITH with *Fractional Credit Courses*. A typical 3-credit course has 42 contact hours; IITH developed courses with 0.5, 1.0, 1.5, 2.0, 2.5, and 3 credits having 7, 14, 21, and 28, 35 and 42 contact hours. The motivation was to atomize the teaching program and also involve industry partners in some aspects of academics. The student enthusiasm, their commitment, and their output was very high in these courses. Based on the overall success of fractional credit courses, we developed a complete 4-year curriculum, referred to as Fractal Academics. The core of fractal academics is that breadth courses are of 1 credit, while depth courses are typically of 1.5 to 2.5 credits. In essence, we are atomizing the academic program, providing a more holistic education, and in the long run giving students the choice to design their curriculum.

The fractal academics at IITH, apart from changing the manner in which the courses are structured also offer a wide range of advantages, a few being:

- Help interdisciplinary education
- Open to all students – allows for greater breadth
- Students have the option of greater number of interesting courses

- Allow students to better tailor their coursework and choose across Departments
- Large basket of non-technical courses (Liberal Arts + Creative Arts)
- Better access to a wide variety of courses increases exposure and preparedness for research
- Synergy in projects - foundation for product development
- A balance is sought between technical and non-technical courses to reduce stress when students enter IIT Hyderabad
- The first two semesters expose students to all the basic tools required for the rest of their Bachelor program
- The curriculum potentially makes students ready for internship right after the first year

Fractal Academics is constantly evolving based on feedback from students and faculty. We believe that it should evolve continuously and keep pace with changing times and changing aspirations of the students.

3. GENERAL ACADEMIC RULES & PROCEDURES

3.1 Course Structure and Credit System

3.1.1 Curriculum

With the medium of instruction as English, every Department has a prescribed course structure which, in general terms, is known as the Curriculum or the Courses of Study. It prescribes all the courses / labs / other requirements for the degree and sets out the nominal sequence semester wise. It also gives the syllabus for each course. The Courses of Study details are updated every semester and are made available at IITH Website under the categories (a) Courses of Study: Bachelors (b) Courses of Study: Masters & PhD.

3.1.2 Credits

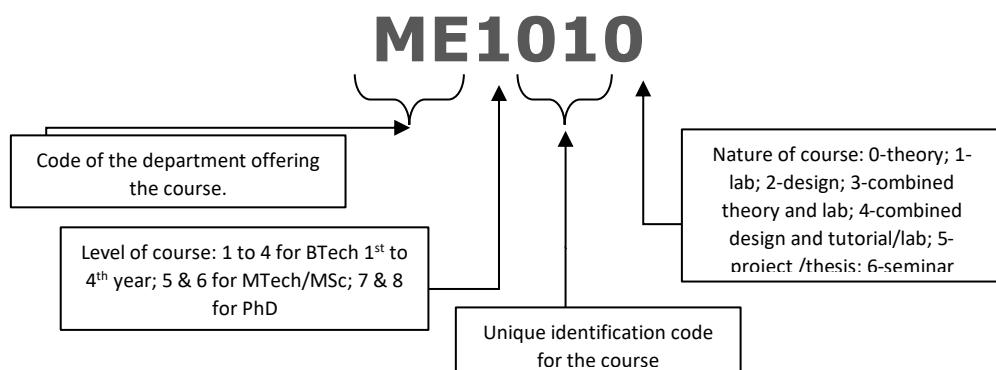
A credit is a measure of the teacher-student interaction in a classroom. In general, a certain quantum of academic work measured in terms of credits is laid down as the requirement for a particular degree. A student's performance/progress is measured by the number of credits that he/she has earned, i.e., completed satisfactorily. Based on the course credits and grades obtained by the student, grade point average is calculated. A minimum grade point average is required to be maintained for satisfactory progress and continuation in the Program. Further, a minimum number of earned credits and a minimum grade point average should be acquired in order to qualify for the degree. All Programs are defined by the total credit requirement and a pattern of credit distribution over courses of different categories.

The credits associated with a course are dependent upon the number of hours of instruction per week in that course and also on the number of fractal segments the course spans. Typically, a theory course running for a full semester has three hours of instruction in a week and is equivalent to 3-credits. Similarly, a full semester lab course will have one 3-hours lab session in a week and is equivalent to 2-credits. In fractal system, depending on number of segments the course spans, proportion of credits will change accordingly. Credits of some courses with tutorial sessions or project courses or thesis credits will vary from curriculum to curriculum and are defined based on course structure.

A student is allowed to attend classes in a course and earn credit for it, only if he/she has registered for that course. At the end of every course, a letter grade is awarded in each course for which a student had registered. On obtaining a pass grade, the student accumulates the course credits as earned credits. Students also have the option of auditing a few courses. Grades obtained in audit courses are not counted for computation of grade point average. If the instructor permits, students can also "sit-through" the course without any formal registration; however, there will be no formal mention of such a sit-through or any retrospective consideration of such participation. Students are allowed to attend audit courses with permission from the course instructor. The award of 'AU' grade, whether 'to give' or 'not to give' will be decided by the course instructor only, based on the performance of the student in that particular course. If the student does not perform satisfactorily, then he will not be awarded any grade and the course will not be shown in the transcript.

3.1.3 Course Numbering Scheme

Each course is denoted by a course number consisting of two alphabets followed by four numerals:



3.1.4 Course Coordinator/Instructor

Every course is usually coordinated by a member of the teaching staff of a Department in a given semester. This faculty member is designated as the Course Coordinator or Instructor. He / she has the full responsibility for conducting the course, coordinating the work of other members of the faculty and teaching assistants involved in that course, administering assignments, conducting the tests as well as moderating and awarding the grades. For any difficulty related to a course, the student is expected to approach the respective course coordinator for advice and clarification. The distribution of the weightage for tests, quizzes, assignments, laboratory work, term paper, etc. that will be the basis for award of grade in a course will be decided by the course coordinator of that course and announced at the start of the course.

3.2 Academic Calendar

3.2.1 Semesters

The academic session normally runs from the end of July in one year to the middle of July in the next year. It is divided into three parts:

- Semester I: From the fourth week of July to the last week of November
- Semester II: From the last week of December to the last week of April
- Summer Term (not a regular semester): From the middle of May to the middle of July
- Winter Term (not a regular semester): From the first week of December to third week of December

Each of the two regular semesters consists of a mid-semester recess. There are also three exam slots provisioned in a semester for conducting exams. Considering the fractal and continuous evaluation system, these exam slots are optional, i.e., the instructor may or may not schedule an exam during this time. If an instructor wishes to conduct the exam, he/she can do so in the same teaching slot (the same should be informed to students). If the exam needs longer duration, an alternate time feasible to all may be explored. It may be noted that during the exam days, there will be no classes (for both fractal and non-fractal courses).

The dates of all academic activities including those of registration, late registration, first and the last days of classes, examinations, make-up examination, deadline for final grade submission, mid-semester recess, and vacation are published in the Academic Calendar every year. Academic calendar for each year will be available on IITH website.

Convocation is usually scheduled on the 3rd Saturday of July every year. Senate meetings will be held on 3rd Wednesday of July, October, January and April. However, the date may change based on the situation.

3.2.2 Fractal Segments

In the fractal system, a semester is divided into six segments. Each segment is approximately 2.5 to 3 weeks in duration. Every fractal course is accompanied by a two-digit segment number indicating the duration of the course. The first number denotes the segment in which a course will begin and the second number the segment in which it will be completed. For example, Segment 34 means, a particular course will begin in segments-3 and finish at the end of segment-4. Typically, a course running for a full semester (i.e., all six segments) would be 3-credits; so each segment will be equivalent to 0.5 credit. Accordingly, the credit of a course will be decided, based on its segment data. For example, if the segment of a course is 56, it implies that the course will be running in two segments (5 & 6). Hence, it will be $0.5 * 2 = 1$ credit.



SEG → CREDITS	SEMESTER					
	1	2	3	4	5	6
0.5	11	22	33	44	55	66
1.0	12		34		56	
1.5		13			46	
2.0		14				
2.0				36		
3.0			16			

3.2.3 Class Timings

The classes are usually scheduled between 9:00 to 17:30 with a lunch break from 13:00 to 14:30. Some additional classes may also be scheduled in the evening hours. The classes in the forenoon are of 55 minute duration with a 5 minute recess in between; the afternoon classes are of 85 minute duration. While the regular classes are scheduled in a 5-day week, from Monday to Friday, the institute presumes a residential ecosystem and the instructors may schedule some additional classes/exams/activities in the weekends too.

3.3 Registration

Each admitted student is required to register before the commencement of each semester to study during that period in the Institute. Registration is a very important procedural part of the academic system. The registration procedure ensures that the student's name is on the roll list of each course that he / she wants to study. No credit is given if the student attends a course for which he/she has not registered.

The student can register for courses he/she intends to take during a given semester on the basis of the Program for each discipline as given in the Courses of Study and as per the advice given by his/her Faculty Adviser. The Faculty Adviser is expected to discuss with the student his/her academic performance during the previous semester and then decide the number and nature of the courses for which he/she can register during the semester within the framework of the guidelines as approved by the Senate.

Registration for courses has to be done through the web based system within the prescribed dates announced in the Academic Calendar. The submitted registration will be considered auto approved and no formal approval of the faculty advisor will be needed; hence students are advised to carefully complete the registration process and feel free to discuss the details with the faculty advisor before submission.

It must also be ensured that there is no time-table conflict between the courses for which the student has registered. Students must also pay attention to the category under which a particular course is being registered (eg: Departmental Core, Department-Elective, LA/CA Elective including categories such as Regular, Backlog, Improvement etc). As mentioned earlier, the responsibility for completing the registration process correctly and timely rests with the students; he/she may approach the faculty advisor for any clarifications.

In addition to academic registration, it is also essential for the student to pay all the relevant fee and complete the financial procedures for the registration process to be complete.

3.3.1 Pre-Registration

Every student must pre-register for the next semester at the time specified in the Academic Calendar. Pre-registration is done entirely online. It may be noted that pre-registration is an expression of interest in the next semester and the student has time till add-drop date to make any changes in the list of courses selected during the pre-registration.

3.3.2 Final Registration

Before the commencement of classes of each semester, on a date specified in the Semester Schedule, every student is required to be present on campus and validate his/her registration by logging into the portal. In exceptional

circumstances they may be allowed to complete the process after the due date of registration by paying the late registration fee. The student is also expected to pay his/her fees before the beginning of the semester. Late payment of fees will attract a penalty applicable from time to time.

3.3.3 Add/Drop of Courses

Students may add or drop courses using the online registration system during the period specified for this purpose in the Academic Calendar. Each add/drop request needs to be accepted by the concerned faculty advisor. The following are some rules regarding add/drop of courses (note: these timelines are relative to the start of that course in the fractal setup)

- Adding of a course can be done upto one week of starting date of the course.
- In rare situations late registration to a course is permitted till the course drop deadline upon payment of late registration penalty.
- Dropping a course can be done within one week for a 1 credit course, two weeks for a 2 credits course and three weeks for a 3 credit course from the start-date of the fractal segment in which the course is running.
- Dropping of the course after stipulated time is not possible and even if the student does not participate in the classes/exams, it may reflect in the transcript in the form fail (F) grade.

3.3.4 Type of Courses/Electives

During the registration, the student is also expected to select under which category she/he is registering for that course. The following is a list of possible course types and their description:

Course/Elective Type	Description	Nature of Course
Basic Engineering Skills	Courses of other Engineering departments	Mandatory/Compulsory
Basic Sciences	Courses of Science departments	Mandatory/Compulsory
Departmental core theory	Theory courses offered by same department	Mandatory/Compulsory
Departmental core laboratory	Lab courses offered by same department	Mandatory/Compulsory
Departmental elective	Elective courses offered by the same department	Elective
Free elective	Any course offered by any department	Elective
Creative Arts elective	Any course offered under Creative Arts	Elective
Liberal Arts elective	Any course offered by LA department	Elective
Additional	Essential/optional courses beyond the department wise curriculum.	Clean India: Mandatory NSO/NSS: Mandatory Any other courses: optional
Professional Ethics	Ethics and Values	Mandatory/Compulsory
Self-study course	Any course where learning happens in a series of interactions, self-reading of text books, video lectures and regular exams instead of scheduled classes (typically meant for higher level courses offered in summer vacation)	Additional courses/ electives/ backlog courses/ summer courses

In addition, for each course the student is expected to select if the course is a (a) regular course or (b) backlog course or c) Audit course. These categories once selected cannot be edited freely by the student subsequently. Hence, she/he is advised to pay careful attention to these categories and approach the faculty advisor for further assistance if required.

3.3.5 Change of Course-Type

BTech students, at the end of the sixth semester, can avail a one-time option of change of course type (example: converting electives to additional courses or vice versa) provided they satisfy the course type definitions mentioned in the previous section. This one-time conversion is not applicable for audit courses. Also, it may be kept in mind that this is a one-time, irreversible step and cannot be undone later. Request for this has to be given by the student through FA and DUGC/HoD to the Acad section. The maximum course credits to be allowed for conversion are 16 credits.

3.4 Attendance & Leave Rules

3.4.1 Attendance

Although it is expected that students attend all the classes, the Senate does not mandate any minimum percentage of attendance for passing a course. However, the course instructor can assign upto 10% of the weightage for attendance. This attendance policy will be announced by the course instructor at the beginning of the semester. It may also be noted that with continuous evaluation and regular tests (occasionally during the class timings) the cost of missing classes may be much higher.

3.4.2 Vacation

The institute has two semesters (Jul, Jan) and two vacations (winter, summer) in a year. Undergraduate students can avail the winter and summer vacations as specified in the Academic Calendar without seeking any permission. This Vacation gap is not applicable for postgraduate students and they are guided by respective leave rules. Also, the other regular activities of the institute will continue as usual even during vacation time. Infact, semester time and vacation time can more appropriately be termed as class/course time and no-class time (with more emphasis on research work during that time).

3.4.3 Short Leaves & Semester Withdrawal

Leave of absence during the semester is discouraged for all registered students. However, for bona fide reasons, a student may apply for leave during the semester. For medical reasons, a student can avail Medical leave of maximum one-third of the course duration or less number of continuous days. Also, the student may be advised to take the semester drop, if the duration of medical leave is much longer. If the student goes on medical leave, information needs to be given to Institute authority within one week about the medical leave through email/letter by him/her or his/her parents (or first order of family members).

A student may be allowed a long leave of absence for a whole semester for bona fide reasons. The following are the rules regarding such semester withdrawal:

- Semester withdrawal and absence for a semester can be under different conditions (i) medical (ii) acute personal problems, on the recommendation by the DUGC/DPGC.
- Semester Withdrawal (SW) is proposed to reflect the condition in which a student is forced to withdraw from all courses in the semester for medical conditions or for an external student when he/she is sent for an outstation assignment by his/her employer. A student can apply for semester withdrawal if he /she has missed at least 20 teaching days on these grounds. Under no circumstances, an application for semester withdrawal will be acceptable after the commencement of major exams. A student is not permitted to request for withdrawal with retrospective effect.
- In case the period of absence on medical grounds is more than twenty working days during the semester, a student may apply for withdrawal from the semester, if he/she so desires.
- Semester Leave (SL) is proposed to indicate the situation in which a student is permitted to take one or more semesters off for industrial internship or any other assignment with prior approval and planning. The application is to be routed through his/her advisor / Program coordinator and HOD and the final approving authority will be Dean Academics. All such applications must be processed before the beginning of the semester in which the leave will be taken.

- At present, JEE-entry (BTech, dual degree and double major) students are allowed one extra semester for completion of the Program for every semester leave for industrial internship. Such students are permitted a maximum of two semesters of leave.
- The full-time 2 year MTech/MSc students are permitted a maximum of one semester leave for industrial internship or other assignment as approved by the Dean, Academics. These semesters will not be counted towards the maximum permitted time period for completion of the degree.
- When a student (UG or PG) registers at another academic institution in India or abroad with the expectation of credit transfer or research work through a pre-approved arrangement including MoU, the student should be considered as being on a Semester Exchange (SE). The SE period will be counted towards the total period permitted for the degree.

The following is the application procedure for such semester leaves:

- Any application on medical grounds shall be accompanied with a medical certificate from the Institute Medical Officer. A certificate from a registered medical practitioner containing the registration number may also be accepted in those cases where a student is normally residing off-campus or becomes ill while away from the Institute. Upon reporting back to the institute, the student is also expected to produce a fitness certificate stating that the student is fit to continue studies.
- A Ph.D student may apply for withdrawal after the consent from the supervisor and the case may be considered by the DPGC on a case to case basis.
- The student applies to the Institute within 15 days of commencement of the semester or from the date last attended the classes, stating fully the reasons for such withdrawal together with supporting documents (and endorsement of the parent/guardian for Bachelor students).
- The Institute should be satisfied that, inclusive of the period of withdrawal, the student is likely to complete all the requirements for the degree within the maximum allowed years of admission to the program.
- There should be no outstanding dues.
- The period of authorized absence in the semester should not be less than three weeks in a Semester, for which withdrawal is to be granted. Regularity in attending the classes/ department and satisfactory performance in research/ the mid-term examinations, if any, held prior to the date of application for withdrawal are the factors which would be taken into account while recommending/granting withdrawal.

3.5 Teaching and Evaluation

3.5.1 Conduct of Courses

The list of courses to be offered by a department in the next semester is finalised by the department before the pre-registration period in the current semester. For the summer term, this list is finalised before the registration date for the summer term and would also need an additional approval from the Director. The courses to be offered are decided by taking into consideration all the requirements of the Program templates. For offering elective courses, it is expected that at least 5 students are registered for a course.

Each course is conducted by the Instructor with the assistance of the required number of instructors, tutors, and teaching assistants; the instructor has the overall responsibility for the successful completion of the course.

For floating a new course, any faculty member can put a proposal to the Senate post approval of SUGC/SPGC with the details of the syllabus and reference books and the format of such proposal is available on our website. All courses (and any changes to them) in the institute must be approved by the Senate and are identified by their unique course number. This will apply to new subjects that may include Advanced Lab/Theory. If the primary instructor is from IITH, there is no need for approval of the Senate. If the primary instructor is not from IITH, prior approval of the Senate should be obtained before operating the course.

3.5.2 Modes of Evaluation

Semester-wise performance assessment of every registered student is done through various modes of examinations. The Instructor will announce the modes of evaluation and distribution of weightage for each of the assessment at the beginning of the course.

Various modes of assessment used for rating students' performance in a theory course include quizzes, class tests, home assignments, group assignments, viva voce, and end-semester examination. Makeup for any absence from in-semester evaluations like midsem/tests/quizzes will be at the discretion of the Instructor. Instructors need to be convinced that the reasons for absence are genuine.

The assessment in a laboratory course will be based on turn-to-turn supervision of the student's work, her/his performance in viva-voce examinations and group discussions, the quality of their work as prescribed through laboratory journals and an end-semester test that contains an experiment or a written examination.

Projects are supervised, and need regular interaction (at least once a week) with the supervisor. Student has to submit a project report and defend it in front of a panel of examiners, upon which the final grade is awarded. The dates for submission of reports, the dates for presentations, and details of mode of assessment are decided by the individual departments.

Sufficient care is taken while evaluation of answer scripts. Any re-evaluation of evaluated answer scripts before the grade submission is at the discretion of the instructor. The instructor will allow students to see the evaluated answer scripts before finalization of grades. The instructor is expected to preserve the evaluated answer scripts for one additional semester.

3.5.3 Academic Malpractice / Plagiarism

Any academic malpractices are severely dealt with at IITH. In the case of malpractice during any of the valuations like assignments, quizzes, tests, and examinations, the instructor can award a fail grade in the course immediately on occurrence and report the matter to the academic office. If the Dean (AP) finds that the offence is serious enough, s/he may further refer the matter to the Disciplinary Action Committee. Students may also note that carrying cell phones to the exam hall is strictly prohibited.

In every other respect also, students are expected to do their academic work with integrity, with proper acknowledgement if material from other sources is included in their own work. Plagiarism, whether intended or not, is an act of academic dishonesty and will be penalized as such. If there is any doubt about what constitutes plagiarism, students should consult their instructors to ensure the maintenance of academic honesty in their work. Any case of cheating will be dealt with strictly by the Institute.

3.5.4 Assessment Rubric: Course grades

The grading in IITH is relative and is based on the Instructor's perception of what an average performance is. At the end of the course, based on continual evaluation throughout the course (in the form of assignments, pop quizzes and examinations), a student is given one of eight passing letter grades, namely, A+, A, A-, B, B-, C, C-, and D carrying credit points of 10, 10, 9, 8, 7, 6, 5, and 4, respectively, or a fail (F) grade carrying zero credit points. Upon obtaining any of the above pass grades, the student is deemed to 'earn' those course credits.

If a student gets a Fail (F) grade, no credits are earned for that course. A Fail (F) grade implies that the student has to go through the entire course again, if the course is a core course. If the student gets a Fail (F) grade in an elective course (Category: Department elective, free-elective, LA-elective, CA-elective etc.), then the student can repeat the same course or take a different course satisfying the equivalent credit requirements of that earlier course in a similar category. Supplementary exams will be conducted for medical cases only. The student will be awarded whatever grade is stipulated for the marks obtained. To avail this, the student must submit the medical certificate at the time of joining the institute after medical break.

An 'I' grade is usually used to denote incomplete status and is followed by a regular grade (for a theory course, the 'I' grade needs to be replaced with the regular grade as soon as possible but not later than the commencement of next semester. For a project course, conversion from 'I' grade to regular grade should happen within one semester). Further, grades of AU, S and U stands for Audit, Satisfactory and Unsatisfactory grades, respectively.

Grading Transparency: Students may be allowed to see the answer sheets within five days after the final exam or as informed by the instructor via an e-mail communication through AIMS (before submission of grades).

The grades of a course are expected to be submitted by the course instructor within one week of the end of that course and the grades are announced to the student at the end of each segment.

3.5.5 SGPA/CGPA calculation

The academic performance of a student is calculated using two parameters viz., Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA). The SGPA is the weighted average of the grade points obtained in all the courses registered by the student during the semester. For example, if a student passes five courses (Theory/Labs/Projects/ Seminar etc.) in a semester with credits C1, C2, C3, C4 and C5 and her/his grade points in these courses are g1, g2, g3, g4 and g5 respectively, then her/his SGPA is equal to:

$$SGPA = \frac{(C1 * g1) + (C2 * g2) + (C3 * g3) + (C4 * g4) + (C5 * g5)}{(C1 + C2 + C3 + C4 + C5)}$$

The CGPA indicates the overall academic performance of a student. It is computed to two decimal places, in the same manner as the SGPA, except that here we consider all the courses registered up to and including the latest completed semester. The CGPA will reflect the failed status in case of FR grade(s), till the course(s) is/are cleared. When the course(s) is/are cleared by obtaining a pass grade on subsequent registration(s) the CGPA will only reflect the new grade and not the fail grades earned earlier (however, as SGPA transcripts refer to an activity in a given semester, they will continue to show the FR grade for that particular semester). Similarly, whenever a student is permitted to repeat or substitute a course, the new letter grade replaces the old letter grade in the computation of the CGPA. The courses which are registered as additional courses and which do not form the minimum requirement of the degrees will not be considered for calculation of the CGPA. Such additional courses undertaken and the grades earned by the student will be shown separately.

3.5.6 Semester wise grade card of Academic Performance

At the end of each semester, the student is given a semester wise grade card. This is a consolidated list of courses registered and grades obtained in that particular semester along with the appropriate SGPA calculation. In addition to reporting the grades obtained in that semester, it also serves as an indicator of the academic track of the student.

3.5.7 Transcript: Consolidated Statement of Academic Performance

Transcript is the consolidated statement of the Academic Performance of a student for all the semesters since joining the Program and is given to a student on successful completion of the Program along with the degree certificate. For those students who have taken multiple attempts to clear a course, the transcript given on successful completion of the Program will only contain earned pass grade; the course will however be shown in the semester in which the student has finally cleared the course. The transcript will show only the overall CGPA based on all the courses taken by the student. Additional courses will be shown separately, indicating also the minor/ honors, if any, earned by the student. Students who have not yet completed the Program can obtain an Interim Transcript, if needed, on request. The Interim Transcript includes failed courses which have not been cleared at the time of issue.

3.5.8 Course Feedback

On the completion of the course, the student is requested to give feedback on the conduct of the course. These feedbacks are formally documented in an anonymous manner and help in improving the quality of teaching at IITH.

3.6 Awards & Medals

To promote and recognize academic excellence and overall growth and development of students, the Senate awards a number of prizes and medals. The following are some of the medals awarded at the time of graduation, during the convocation:

- President of India Gold Medal for securing highest overall CGPA in BTech
- Institute Gold Medal for securing highest overall CGPA in MSc
- Institute Gold Medal for securing highest overall CGPA in MTech
- Institute Gold Medal for Excellence in Academics and Co-Curricular Activities
- Institute Silver Medals for securing highest overall CGPA in each Branch/Course of Study

For the above medals, the student(s) with the highest total grade points and no academic irregularities during the Program shall be considered. In case of a tie, the performance of (a) student(s) with a larger number of A+ grades, would be deemed to be superior. In case of a tie even then, the performance in the additional courses, including Honors/Minor would be deemed superior.

In addition to the above medals, the following awards are also given to the students in the course of their study, on the eve of Foundation Day of the Institute (typically in the month of March of every year):

- **Excellence in Academics:** This will be awarded to students who excel in Academics and is based on the Grade Point Average of two semesters in the preceding calendar year (or just one semester for the first year students). In case of a tie, the performance of (a) student(s) with a larger number of A+ grades, would be deemed to be superior. In case of a tie even then, the performance in the additional courses, including Honors/Minor would be deemed superior. These awards are given department wise as follows:
 - BTech: 1st year, 2nd year, 3rd year & 4th year batches
 - MSc/MDes/MA: 1st year & 2nd year batches
 - MTech (2-year): 1st year January Batch, 1st year July batch, 2nd year (Jan & Jul) batches
 - MTech (3-year): July batch (the CGPA of 3 consecutive semesters of the preceding calendar years will be considered) and Jan batch (the CGPA of 2 semesters of the preceding calendar year will be considered).
 - Thesis / Project Grades are not considered for MTech/ MDes/ MA students.
- **Excellence in Research:** This will be awarded to PhD students who have their publication(s) in reputed journals/conferences during the preceding calendar year.
- **Appreciation in Research:** This will be awarded to the students (other than PhD Scholars) who have their publication(s) in reputed journals/conferences during the preceding calendar year (even if the student is a recipient of Academic excellence award in the preceding year). Hence, this appreciation may be given every year.

The students who received the excellence in Academics award last year are not considered for the subsequent year. For 3 year MTech students, they will be considered only once in their tenure. PhD candidates are eligible to receive the research excellence awards a maximum of two times in the total PhD duration.

In addition to the above list of awards to the students, "Excellence in Teaching" awards will be given to faculty members based on the students' feedback.

3.7 Scholarships

A number of scholarships including Merit-cum-Means (MCM) are awarded to the students by the Institute according to the rules and procedures of IITH, overseen by the academic office. The details of the various kinds of Scholarships available to students can be viewed at: <https://www.iith.ac.in/academics/scholarships/>

At any given time only one scholarship (opted by the student) can be availed by any student.

3.8 Mentoring & Statutory Support for Students

3.8.1 Faculty Advisor, DUGC, DPGC

IITH runs a system of faculty advisors where a faculty member is assigned at the time of joining to look after the general welfare of a set of students. The faculty advisors offer all the necessary guidance and help in academic matters, and, if need be, in personal matters. Students are expected to consult the Faculty Adviser on any matter relating to their academic performance and the courses they may take in various semesters. Faculty Adviser guides the students to complete their courses of study for the required degree in a smooth and satisfactory manner. The following are some of the roles and responsibilities of a faculty advisor:

- The Faculty Advisor is expected to introduce herself/ himself to all the concerned students in the department, preferably at the time of department orientation.
- Discuss what the student already knows about the IIT system and give him/her relevant information, especially in the beginning of the student's academic program.

- Review courses already taken and those offered in the upcoming semester.
- Faculty Advisor serves as a guide to the students in their course selection.
- Faculty Advisor serves as a liaison between students and course instructors on many academic matters including learning disabilities, language barriers, etc.
- Review students' academic progress at least once a semester
- Identify cases where the students' performance is deteriorating. Discuss with the student and suggest avenues for improvement/ support.
- Coordinate with other academic bodies, if needed.

In addition to the faculty advisor, each department may also have a Departmental Under-Graduate Convener (DUGC) and Departmental Post-Graduate Convener (DPGC) whose roles and responsibilities are as follows:

Departmental Under-Graduate Convener (DUGC):

- Oversee BTech/ BDes curriculum implementation keeping track of changes/updates if any.
- Coordinating the floating of necessary courses/ electives to meet the curriculum requirements for BTech, Minor, Honors etc.
- Assisting Faculty Advisors (particularly in special cases like, double major, long leaves etc.) and ensuring timely execution of duties by FAs.
- Assigning duties to BTech TAs.
- Act as Member of SUGC

Departmental Post-Graduate Convener (DPGC):

- Oversee Masters and PhD curriculum implementation keeping track of changes/ updates if any.
- Coordinating the offering of necessary courses/ electives to meet the curriculum requirements for Masters/ PhD students.
- Assigning duties to the TA category students.
- Coordinating the guide selection and allotment exercise.
- Coordinating the admissions for Masters and PhD programs (with the help of admission incharge if any).
- Handling all the conversion requests (BTech to BTech+MTech, MTech to MTech+PhD, BTech to BTech+PhD).
- Act as a first contact point/ mediator for any guide-student issues.
- Act as member of SPGC

3.8.2 Class Committee

The Head of the Department has to constitute a Class committee, consisting of a group of Faculty Advisors (of different batches) which will interact with the students more often and proactively to discuss any problem related to any course.

3.8.3 Early Intervention Committee

The Early Intervention Committee (EIC) is responsible to provide extra support to the students to prevent them from suffering academically, socially and emotionally due to any reason.

Structure of EIC:

- A faculty member is assigned to a group of 20 new students when they join IITH. This faculty member is expected to play the role of a friend to these students
- Weekly or fortnightly group meetings can be held to discuss various issues both academic and non-academic
- A group will typically contain one permanent faculty member of IITH and a group of 20 students from various departments.
- Concentration of one type of students (students speaking the same language or students from the same branch) in a single group is discouraged.

Role and responsibilities of EIC faculty member:

- The faculty is expected to interact with the group informally and identify students who might need more attention.
- Such meetings are expected to take place either weekly or fortnightly depending on the convenience of the group members
- EIC faculty member is expected to keep track of the academic performance of the members in the group.
- If necessary, the EIC faculty member can contact the faculty advisor or course coordinators for special assistance.

3.8.4 Sunshine & Counselling Cell

IITH has a dedicated guidance and counselling unit and student mentors who can help and offer advice in all kinds of matters. Since its inception on January 12, 2012, Sunshine- the counselling cell at IITH, has been committed to helping the student community. The dedicated team of Sunshine comprises a faculty in-charge, psychological counsellors, faculty representatives, student heads, management team members and student mentors.

The Sunshine cell also runs the Student Mentorship Program. This program is aimed at offering the incoming students an interface to understand and interact with the diverse student community at IITH. With the institute having a strict anti-ragging policy, the program also doubles up as an excellent ice-breaker. The objectives of the student mentor program include:

- Welcoming and orienting the new students of IITH.
- Guiding the new students about life at IITH campus, the Student Gymkhana and its activities, college fests, etc.
- Providing academic guidance to the students.
- Enforcing the anti-ragging rule.

On the whole, the program aims to provide the incoming students with a cordial environment to make their transition to the IITH way of life as smooth and fun-filled as possible. For more information you can visit www.sunshine.iith.ac.in

3.8.5 Grievance Cell

IIT Hyderabad has a Student Grievance Committee for students to approach in the event of academic as well as non-academic grievances. It can be contacted at the following email id: sgc@iith.ac.in

3.8.6 Women's Cell

Women's Cell, IIT Hyderabad is established to ensure a safe and secure working/ studying environment for women in IIT Hyderabad. All female students, faculty and staff of IIT Hyderabad are members of the Women's cell. More information about the same can be accessed at the following link: <http://womencell.iith.ac.in/> and can be contacted at the following email id: women_cell@iith.ac.in

3.8.7 SC/ST Cell

To safeguard the rights and privileges of SC/ST, a SC/ST Cell headed by a Liaison Officer and 3 members of faculty/staff is operative at IIT Hyderabad. In addition to acting as a statutory body, the SC/ST Cell also informs the students about the various scholarships and fellowships and encourages them to apply for relevant ones. It can be contacted at the following email id: sc_stcell@iith.ac.in

3.8.8 Equal Opportunity Cell

The Equal Opportunity Cell deals with the issues of OBCs, Religious Minorities, PWD, Kashmiri Migrants and kin of Armed Forces.

4. REGULATIONS AND PROCEDURES: BACHELORS (BTECH & BDES)

4.1 Admission

B.Tech.: Admission for the BTech program is through the JEE (Advanced) examination and the corresponding branch allocation as part of the counselling process.

B.Des.: Admissions to the Bachelor of Design (BDes) programmes at IIT Hyderabad is through the Undergraduate Common Entrance Exam for Design (UCEED). There will be a common application form for admissions. The UCEED Office will process the common application form and carry out the joint seat allocation process.

4.2 Overall Degree Requirements

4.2.1 Credit Requirements

For a BTech degree, it is necessary to earn a minimum of 125-130 credits (will vary in that range for each branch) and also fulfil the category-wise credit requirement such as core courses, Department electives, LA/CA electives, etc. In addition, satisfactory completion of NSS/NSO activities and Clean India course is mandatory. Amongst the LA/CA electives, a minimum of 60% of those credits should be from LA; the CA credits should not exceed 40%. For a typical BTech degree Program, around one-fifth of the credits are for common courses, about three-fifths are for the core courses in the discipline of the student and the rest are set aside for the student to choose in terms of Department electives, liberal arts electives, and free electives. There is scope for a student to take additional academic load in the form of additional courses, minor, honors, etc.

Structure of BTech Curriculum (applicable from 2020 batch onwards):

- Total credits 125-130.
- about 12-13% basic sciences, about 12-13% basic engineering skills, 55-60% departmental subjects (including core, elective and project),, about 7-8% liberal/creative arts and about 10% **free** electives.
- Emphasized more hands-on lab components in the curriculum, typically an average of at least one lab course a semester.
- A mandatory 1-credit course on "personality development" (to be completed before the student graduates)
- A mandatory 1-credit course on "life sciences" (to be completed before the student graduates). The Biotechnology department will coordinate.
- LA department to teach English communication course.

Additional Aspects of Curriculum:

- Minimum 40% of the overall credits must be 3 credit courses.
- Students cannot take more than 4 credits of CA, and 6 credits of LA courses
- Method of evaluation for each course should be communicated to all students and DUGC by email/moodle.
- Departments may allow a semester-long internship for students (CGPA>8) in the 6th semester. This will earn 6 credits and needs to be evaluated and graded by the department after the students completes the internship. The students should complete the rest of the 6th semester credits, including the core courses, in the other semesters
- If a student fails in a course a Fail (F) grade will be awarded. Supplementary exams will be conducted for medical cases only. If the F grade is obtained in a core course, the student needs to repeat it whenever it is offered in the later semesters. If the F grade is obtained in an elective course, the student can either repeat it whenever it is offered in the later semesters or take another course/s with equivalent credits with necessary approvals.
- On 6th semester internship: Interested students (with CGPA>8) may opt for internship option in 6th semester. It is the student's responsibility to complete the courses of 6th semester, which he/she misses due to internship, in any other semester. Department assumes the responsibility for awarding the grade for the internship.
- From BTech 2021 batch onwards, the name of the Degree for students taking up specialization in another department, will be "B Tech in Engineering Science with specialization in 'xxx'.

- For Engineering Science students, the credit requirements for the Double Major option will be 24 credits, apart from the credit required for a regular degree. This is uniform across all disciplines.

Criteria to register backlog courses:

- If a student needs to register in Nth semester, but she/he has x credits as backlog in N-2 semester, he/she has to drop x credits from the Nth semester and register them in the N+2 semester to accommodate the backlog courses in Nth semester.

4.2.2 Duration of Study

Generally, a student is expected to complete the requirements for the BTech and BDes in four years (five years for Dual Degree students). The maximum permissible time of the BTech and BDes is six years, within which the student is expected to complete all the credit requirements (seven years for Dual Degree and Double Major students). The students may not be eligible for hostel accommodation beyond their scheduled course period (four years for BTech and BDes, five years for Dual Degree and Double Major students).

4.2.3 Graduation Requirements

A student is deemed to have completed the requirements for graduation if s/he has:

- Cleared all courses as per the respective Program template, satisfying the minimum credit requirement in each course category
- Satisfactorily completed NSS/NSO and Clean India course
- Met the minimum duration and academic requirements
- Satisfied additional requirements, if any, of the parent department
- Paid all dues to the Institute and the Halls of Residence
- No case of indiscipline is pending against her/him

4.2.4 Termination from Program

The enrolment of a student to the institute will lapse after the maximum permissible number of semesters. Hence, a student who is not able to complete the graduation requirements within the maximum permissible time will be deemed to be automatically terminated from the program. Students facing disciplinary action for any serious offence (example ragging) may also face premature termination from the program, if so recommended by the disciplinary action committee.

A student whose Program is terminated may appeal to the Chairperson, Senate, for reinstatement in the Program. In cases of termination due to inadequate academic performance, the student should clearly explain causes for the poor performance, including how those causes will not adversely affect her/his performance in the future. The Senate shall take a final decision about reconsideration of termination after considering all available inputs; the termination of the student remains in effect till otherwise recommended by the senate.

Students who do not register for more than 2 consecutive semesters without information/prior approval will be terminated. However, the student may appeal within one month from the date of termination notice.

4.3 Additional Options for Academically Motivated Students

4.3.1 Additional and Audit Courses

On top of the prescribed curriculum a student can also opt for doing additional courses. These courses and their grades will also be mentioned in the transcript of the student (but will not be considered in the CGPA calculation). Similarly, a student can also Audit a course; audit is similar to additional courses except for that the grade will be shown as AU in the transcript.

4.3.2 BTech Teaching Assistantship

Interested senior undergraduate students with a good CGPA can act as Teaching Assistants for beginner courses. Department may decide the criteria for Teaching Assistantship. Usually, the students are expected to put in six hours of work every week for this. No stipend will be provided for this work. However, a certificate of appreciation will be issued in this regard from the Director.

4.3.3 Honor/ Minor

A UG student can enrol for Minor program in a department other than his/her parent department and Honors program in parent department. Following are the guidelines:

- In order to earn a minor degree, a student has to earn a minimum of 12 extra credits from a basket of courses prescribed for each minor stream (if a student has already done some of the required courses as free electives before, he may approach DUGC/ Concerned Department for equivalent credits).
- In order to earn honors degree, a student has to earn a minimum of 12 extra credits in the student's major department out of which six credits will be from the project courses.
- A student can enrol for Minor in the beginning of fifth semester only. There is no CGPA criteria for enrolling into a Minor. However, few departments have cap (10% of the dept. intake) on number of students to be considered for Minor program and the selection will be based on the CGPA.
- A student can enrol for Honor in fifth or sixth semester, depending on the policy of the department.
- A student can also enrol for both Minor & Honors or for two Minors.
- A student must have cleared all outstanding backlogs by the time of enrolment into Minor/ Honors.
- After enrolling into Honor/ Minor, if a student gets Fail (F) grade in more than 3 credits his/ her enrollment to the same will be terminated.
- The main transcript will only show the basic CGPA corresponding to the minimum requirement for the degree. The Minors/ Honors courses will be listed separately in the transcript and carry a separate CGPA.
- Honors will be reflected in the degree certificate as "BTech in XYZ Engineering (Honors)". Similarly, Minor as "BTech in XYZ Engineering with Minor in ABC". If a student has done both honors & minor, it will be acknowledged as "BTech in XYZ Engineering (Honors) with Minor in ABC". Two minors will be reflected as "BTech in XYZ Engineering with Minor in ABC and Minor in DEF".
- CGPA criteria for Honors can be set by the respective Departments.
- Departments offering Minors can put an upper limit (10% of the dept. intake) on the number of Minor students they wish to take. The students have to understand that since the number of seats available for each of the Minor will be limited, one has to compete for a place; he/ she thus cannot ignore the basic CGPA.
- If a student drops from the Minor program, they can convert 3 credits earned in the minor program into free electives if he/she has completed the two third number of total credits as Minor otherwise they will remain additional. These additional courses will find mention in the transcript. In such cases, the student may choose between any of the three following options (a) show the actual grade (b) show the course with just a "pass" grade (c) omit the mentioning of the course.
- If a student drops from the Honors program, they can convert the earned 3 credits into free or department electives; if he/she has completed the two third number of total credits in Honors degree otherwise they will remain additional. These additional courses will find mention in the transcript. In such cases, the student may choose between any of the three following options (a) show the actual grade (b) show the course with just a "pass" grade (c) omit the mentioning of the course.

4.3.4 Double Major

Double major means a student can get a BTech degree mentioning two different departments at the same time. A student may join the IITH in any particular discipline. S/he may then do the required additional courses in another discipline as well to earn BTech degrees from each of those disciplines. An additional one year is permitted for the student to complete these additional requirements. The following are some of the rules related to this program:

- An additional 24 credits as listed by the another department needs to be completed by the student. the second-department may also list an additional set of prerequisite courses in some cases.
- The Double Major registration has to be done before the Add period of 5th Semester (1-2 segment).
- Students can also start accumulating course credits in the form of additional courses and convert them to be counted in favour of Double Major requirements at the time of enrolling into this program.
- No minimum CGPA requirement for registration. However, the student should not have any backlogs.
- Each (second) department can set a cap on the maximum number of students who can avail this option.
- A student cannot do double-major and minor in the same department.
- If a student registers for Double Major (but not for a Minor), completes a few courses, and then opts out of a double major, say, after completing 12 credits, and if these 12 credits also happen to be listed in the Minors basket of courses, then the student should be awarded a Minor.

- After enrolling into double-major, if a student gets Fail (F) grade in more than 3 credits his/ her enrolment to the same will be terminated.
- Similar to Minor/ Honors rules, if a student opts out of the Double Major program, they can convert at most 6 credits into free electives if he/she has completed the two third number of total credits as Double Major otherwise they will remain additional. These additional courses will find mention in the transcript. In such cases, at the time of this opting out, the student may choose between any of the three following options (a) show the actual grade (b) show the course with just a "pass" grade (c) omit the mentioning of the course.

4.3.5 Dual Degree (BTech + MTech; BTech + PhD; BTech + MTech (Interdisciplinary & Cross-Disciplinary))

After joining the BTech program, a student can choose to continue for higher programs by converting to Dual Degree. A student can either convert from BTech to BTech + MTech, BTech + PhD or BTech + MTech (Interdisciplinary & Cross-Disciplinary). The following are the rules in this regard:

Conversion from BTech to BTech+MTech:

- The option to convert will be given at the end of 6th semester. No conversion will be allowed after the add/drop period (1-2 segment) of seventh semester.
- Application (in the prescribed format - available in IITH website) must be submitted to the Head of the Department.
- CGPA upto 6th semester will be considered for shortlisting
- Minimum CGPA requirement is 8.5 for General category, and 8.0 for OBC-NCL/SC/ST for students of 2019 batch onwards and for earlier batches the CGPA \geq 7.0 for general category and 6.0 for SC/ST/OBC
- Only students with no backlogs or no incomplete grades are eligible.
- The candidate will appear for a technical interview with a panel of at least 3 faculty members nominated by the HoD.
- BTech - MTech Dual Degree Program seats are supernumerary
- The duration of the dual degree program is one year extra to the BTech program (minimum 5 years, maximum 7 years).
- MTech Fellowship will be paid after the 8th semester of BTech program
- BTech fees will be paid up to and including the 8th semester.
- For (B.Tech. to M.Tech.) students, both B.Tech. and M.Tech. Degrees will be awarded only at the end (after successful completion of M.Tech.).
- In case, the student decides to leave the dual degree program after the end of fourth year, he/she may be awarded only a BTech provided all the appropriate credit requirements of BTech are completed. MTech courses, if any, will be shown as additional courses in the transcript.
- Fifth year later, he/she may be awarded an MTech degree provided all the appropriate credit requirements are completed.

Conversion from B.Tech. to B.Tech.+Ph.D.:

- For B Tech students, the conversion should be based on CGPA upto 6th semester and this should be done before the start of regular MoE PhD interviews/counselling for the next semester
- A formal application must be submitted through the Head of the Department.
- Minimum CGPA requirement is 8.5 for General category, and 8.0 for OBC-NCL/SC/ST for students of 2019 batch onwards and for earlier batches the CGPA \geq 7.0 for general category and 6.0 for SC/ST/OBC
- The panel for the technical interview should comprise of at least 3 faculty members nominated by the HoD.
- The total number of credits required to be completed after conversion is 24-27.
- BTech fees will be paid up to and including the 8th semester.
- MTech stipend shall be paid till the defence of PhD proposal.
- PhD stipend should be paid after the PhD proposal defence.
- For B.Tech to Ph.D students, B.Tech and Ph.D degrees will be awarded only at the end (after successful completion of Ph.D)

Conversion from BTech to BTech+MTech (Interdisciplinary & Cross Disciplinary):

- **Interdisciplinary:** Interdisciplinary Programs has been created with a vision of fostering interdisciplinary studies across various disciplines at IIT Hyderabad. Institute has formalized the MTech Interdisciplinary programs as part of CIP.
- **Cross disciplinary:** Student opts to convert from BTech in one core department to MTech in another core department. Conversion of BTech students to Cross-disciplinary Dual Degree program is subject to fulfilment of CGPA criteria (8.0 for General and 7.5 for OBC/SC/ST) eligibility and clearing of interview process/selection process, if any, laid by the competent committee, for the respective program. The following guidelines in this regard are:
 1. If a student opts to convert from BTech to MTech in the same department then the present dual degree rules will be applicable.
 2. If a student opts to convert from B Tech in one core department to M Tech in another core department then the student has to take 'Major' in that second core department (needs to complete 24 credits of coursework). At the end of 8th semester the student can convert on the basis of evaluation and recommendation of the committee constituted in this regard. For award of MTech degree, student needs to complete a minimum number of credit requirements of the PG Level courses (level 5 and above), as specified by the respective department/ program (department which offers respective MTech program) and a MTech thesis (24 Credits).
 3. If student opts to convert from Department to ID program then the present dual degree rules will be applicable
 4. Conversion to a Dept. that offers a BTech program needs 24 credits of courses (Double Major, conversion at 8th Sem) and to a Dept. that does not offer a BTech program needs 12 credits of courses (conversion at end of 6th sem)
 5. In case of any such dual degree conversion, students will not get any Double Major/Minor degree as they will get a PG degree finally at the end of the 5th year.
 6. For any such conversions, minimum 50% of the courses should be 5 level courses. For example, in the case of 24 credit requirement, there should be 12 credits of 5 level courses.

4.3.6 Internship for UG students

Internship is not a mandatory part of the degree requirement. However, students are encouraged to pursue internships in various research and industrial setups during the vacation periods. Such internships may be obtained through placement office or through the self-endeavour of the students. If done during vacation periods, without clashing with the academic calendar of the institute, no permission from academic administration will be needed for such internships.

For BTech 2020 onwards batches: Departments will allow a semester long internship for deserving students (CGPA>8) in the 6th semester. This will have 6 credits and need to be evaluated and graded by the department after the students completes the internship. The students should complete the rest of the 6th semester credits, including the core courses, in the other semesters

5. REGULATIONS AND PROCEDURES: MASTERS (M.Tech., M.A., M.Des., M.Sc.) & Ph.D.

5.1 Admission/Conversion

5.1.1 M.Tech.

The Institute admits fresh M.Tech candidates under the following categories:

1. Teaching Assistantship (TA)
2. Research Assistantship through Project (RAP)
3. Govt. Lab./Industry Sponsored (GLS/IS)
4. Self-Sponsored (SS)
5. Online MTech Programs

Admissions under TA are for a 2-year Program while those under RAP are for a 3-year Program. Admission under the Self Sponsored category are available for 2-year program. Admissions to all categories are subject to availability of seats. The continuation of the financial support and the registration for the selected Program will be subject to satisfactory performance of the duties assigned by the Academic Unit as well as satisfactory academic performance and fulfilment of the other academic and non-academic requirements, as per rules.

Students with a valid GATE score or having a BTech degree from any IIT with a CGPA greater than 8.0 are eligible for admission without any written test (however, some departments may choose to have additional written test / interview). For students with no valid GATE score or a BTech degree from IIT (8.0+ CGPA). This may be followed by additional rounds of interview, if needed. A registration on the COAP (Common Offer Acceptance Portal) is also necessary as part of application process for some categories, as updated on admission portal from time to time.

Various differences exist among these categories in terms of stipend/ fellowship disbursed, fee structure, eligibility for hostel accommodation etc. The following table summarizes these requirements for different categories.

		Valid GATE Score	Written Test³ for admission	Stipend	Hostel Accommodation	Fee Structure	Degree obtained
TA: Teaching Assistantship (2-Year) - MoE Funded		Mandatory ⁴	Optional ¹	Funded-MoE	Eligible	Regular	Regular
RAP: Research Assistantship (3-Year) - Project Funded	No Experience	Mandatory ⁴	Optional ¹	Funded-Project	If available	Regular	Regular
	6-month+ experience at IIITH	Optional	Mandatory	Funded-Project	If available	Regular	Regular
GLS/IS: Sponsored MTech (2 Years): Govt. Lab/Industry Sponsored with 2 Years Experience - (Including Armed Forces Officials)		Optional	Mandatory	Not eligible	If available	Non-Subsidized	Regular
SS: Self-Sponsored MTech 2 Years		Optional	Mandatory	Not eligible	If available	Non-Subsidized	Regular
Online MTech programs		Optional	Mandatory	Not eligible	Not eligible	Non-Subsidized	Specific

¹ Optional from the perspective of department, not student; need for additional written test and/or interview will be decided by respective dept.

² Written test is mandatory if the student does not have a valid GATE score.

³ The written test may be followed by additional rounds of interview if needed.

⁴ For students with a BTech degree from any of the IITs and a CGPA of greater than 8.0, valid GATE score is not essential

Industry sponsored candidates are treated on par with the self-sponsored candidates in terms of the course curriculum and other applicable norms. However, this is not applicable to tuition fees. The tuition fee for

Government organization sponsored candidates will be different from that of the self-sponsored/private organization sponsored candidates and will be decided by the Senate Chairman from time to time.

Rules pertaining to TA/RAP/SS are listed in the following sections. Procedures associated with MDS/ EM are listed separately in the section under special programs.

5.1.2 M.Sc.

IITH offers M.Sc. program in (1) Chemistry (2) Mathematics or Mathematics and Computing (3) Physics. Admission to these programs through JAM.

The candidates who have qualified in JAM will have to fulfil the following eligibility requirements for admission into the institute:

- All candidates admitted through JAM should have a Bachelor's degree.
- In the qualifying degree, the aggregate marks or CGPA/CPI without rounding-off (taking into account all subjects, including languages and subsidiaries, all years combined) should be at least 55% or 5.5 out of 10 for General/OBC (NCL)/EWS category candidates, and 50% or 5.0 out of 10 for SC/ST and PwD category candidates.

If CGPA/CPI is on a different scale, it would be linearly mapped to a scale of 10.

For Candidates with letter grades/ CGPA (instead of percentage of marks), the equivalence in percentage of marks will be decided by the institute.

5.1.3 M.A.

IITH offers a full-time Master in Arts (M.A.) program in Development Studies. For admission into this program, the applicant must have a Bachelor's degree or equivalent degree from a recognized University, with a minimum of either 55% marks or 5.5 CPI in a 10-point scale (50%, 5.0 for SC/ST/PwD candidates). Shortlisted candidates must pass a written test and/ or interview conducted by the Department of Liberal Arts.

5.1.4 M.Des.

The institute offers 2 year and 3 year MDes programs:

1. MDes in Visual Design (two year full-time)

For admission:

- a) the candidates **should have a valid CEED score** and a minimum of 55% marks (50% marks in case of SC/ST) or equivalent grades in the qualifying examination, which are:
 - Bachelor's degree in Engineering/Architecture/Design/Interior Design or equivalent (4 year duration after 10+2)
 - BFA (4 year professional program, after 10+2)
 - Masters degree in Arts / Science / Computer Applications (2 year Program after 10+2+3)
- b) Bachelors from IITs
 - The candidates applying under this category must have BTech or BDes from IITs with a minimum CGPA of 8.0 on 10-point scale and pursue 2 years full-time MDes
 - In addition to this, if a candidate has done minor in Design, then 6 credits are waived for the MDes program.
 - CEED is not mandatory.

2. MDes (Project-3 year full time) (TAP)

- Financial assistance provided through funded projects with a valid CEED score.
- CEED is not mandatory for the candidates who have worked on the funded/sponsored projects in IITH for more than 6 months duration.

The selection is based on a Design Aptitude Test and interview.

5.1.5 Ph.D.

The Status of the students admitted to the Ph.D. Program shall be classified under any one of the following categories:

- Full Time Research Scholar
 - Teaching Assistantship (TA) - MoE funded
 - Teaching Assistantship through Project (TAP) - Project funded
 - Govt./ Semi Govt. Fellowship Award (FA) - QIP, CSIR, UGC, DAE, DST, DBT, NBHM, INSPIRE, etc.
- External Research Scholar
 - External candidates, sponsored by recognized R & D organizations

Students admitted to PhD should have completed the required Masters degree in the relevant discipline. For students without a Masters degree, under Direct-PhD after Bachelors or Dual (Masters+PhD) Degree would follow the separate admission procedure, in line with the Masters admissions process elaborated in section 5.4.1

Students admitted under TA category are eligible for hostel accommodation; for students of other categories hostel accommodation is not assured and can be provided only based on availability (Maximum 5 years).

Admission process for MoE, External and Project funded students happens twice a year for July and Jan semesters. Application process for Govt./ Semi Govt. Fellowship Award (Ex: CSIR, UGC, DST, DBT, ICMR, INSPIRE, etc.) funded students is open throughout the year.

5.1.6 M.Tech. to Ph.D. Conversion

- The conversion has to be done before Ph.D./M.Tech regular interviews, so that the remaining seats shall be filled, as per GoI norms.
- For conversion to M.Tech. to Ph.D. seats, These seats are part of the departmental allocation for that academic year. These are not supernumerary seats to yearly allocation of MoE PhD quota
- A formal Application must be submitted to the Head of the Department.
- For M.Tech. students, the conversion should be based on 2nd semester CGPA and this should be done before the start of regular MoE PhD interviews.
- Minimum CGPA requirement of 8.5 for GN category (8.0 for OBC/SC/ST)
- The candidates will appear for a technical interview by a panel of at least three faculty members nominated by the head of the department.
- For getting an M.Tech. degree, the student will have to complete M.Tech course credits (except thesis credits).
- Ph.D stipend to commence after the date of conversion. PhD fees to be paid from the date of conversion
- Credit waiver can be given by DC for up to 6 credits based on the merit of the case
- Comprehensive Exam to be conducted within 12 months from the date of conversion
- Both M.Tech. and Ph.D Degrees will be awarded only at the end (after successful completion of Ph.D.)

5.1.7 Self-Sponsored MTech to PhD Conversion

Candidates who are interested to convert, should indicate their interest at the beginning of 4th semester to the HOD. The MTech thesis submission, evaluation and grade submission in such cases should be completed at least 15 days before the PhD interviews in the departments, so that eligible candidates for conversion can be interviewed before the regular PhD interviews. However, such students should pay a tuition fee for 12 credits of course (@ Rs. 25,000 per credit) as a part of PhD course work credits. Such candidates fall into the following two categories.

- If the department selects them as students with MoE fellowship, they will get fellowship after completing the course work (with 7 CGPA) and after successfully completing the Comprehensive examination. The MoE fellowship duration in such cases will be 4 years. These conversions like the conversion of regular MTech students should be considered as a part of the total number of PhD students allocated to the department as per the roster for that year. They are not supernumerary. These students will pay a tuition fee of Rs. 15,000 per semester until they submit their thesis.
- In case a particular faculty would like to take a self-sponsored MTech student as PhD student in a project mode (provided he/she is selected by the department for PhD under the MTech-PhD conversion mode),

he/she can do so, provided the faculty takes the responsibility of paying the fellowship to the student for 4 years (or until the thesis is submitted, whichever is earlier) at the MoE norms. These students will not be converted from project mode to MoE mode at any stage.

5.1.8 M.Des. to Ph.D. Conversion

For M Des students, the conversion should be based on 2nd semester CGPA and this should be done before the start of regular interviews for MoE sponsored PhD seats for the next semester.

5.1.9 M.A. to Ph.D. Conversion

For MA students, the conversion should be based on 3rd semester CGPA and this should be done before the start of regular interviews for MoE sponsored PhD seats for the next semester.

5.1.10 M.Sc. to Ph.D. Conversion

The option for conversion from M.Sc. to Ph.D. is available to the students at two different stages, elaborated below. The students can apply for conversion at either of the stages subject to meeting the requirements listed against them.

Stage 1: Before the Course Add / Drop in the 4th Semester

- Minimum CGPA requirement of 8.5 for GN category (8.0 for OBC/SC/ST)
- A formal application with a supporting letter from the advisor must be made.
- The candidates will appear for a technical interview by a panel of at least three faculty members nominated by the head of the department.
- Ph.D. stipend will commence after the completion of four semester in the M.Sc program.
- Similarly, the Ph.D. fee has to be paid from the fifth semester onwards.

Stage 2: After the Course Add / Drop in the 4th Semester/ Completion of the Program

- MSc students can also apply for the PhD Program after the end of the course add/ drop of their fourth semester of the Master's Program or even after the completion of the Program.
- MSc students whose CGPA 8.5 for Gen category (8.0 for OBC/SC/ST) at the end of their third semester will be allowed to participate in the Ph.D. admission process.
- In other words, this can be seen as a relaxation of the eligibility criteria for the internal (IITH) students of M.Sc. for admission into PhD Program, after all the credit requirements towards the M.Sc. degree have been met. Such students will be eligible for an M.Sc. degree in their respective streams.
- Note that the students will have to participate in every subsequent stage of a rigorous admission process as stipulated by the department.
- For any such student admitted into the PhD program, his or her admission is valid only if he or she maintains the required CGPA of 8.5 for Gen category (8.0 for OBC/SC/ST) at the end of 4th semester.

Important Points to Note:

- For all the regular conversions (except ID programs, CGPA should be 8.5 or above for General category candidates and 8.0 or above for SC/ST/OBC category candidates).
- All the Masters conversion has to be done before PhD/MTech regular interviews, so that the remaining seats shall be filled, as per Government norms.
- For all PG programs the maximum course credits to be allowed for conversion (Additional to regular and vice-versa) are 8 credits.

5.2 General Regulations & Procedures

5.2.1 Operational Details of Teaching & Research Assistantships

The stipend given to Masters/ PhD. students is called Teaching Assistantship. Students receiving Teaching Assistantship are called Teaching Assistants (TAs). This TA'ship is mandatory for all students (irrespective of their funding).

The typical ratio is one TA for every 15 students in Theory courses and one TA for every 10 students in Lab courses. But the department can allot the work appropriately considering the unique features of each course and lab.

Each TA will be assigned to work with a faculty member by their respective department. The concerned faculty member is responsible for monitoring TA's work. This typically involves the TA maintaining a work schedule and signed and approved by the concerned faculty to ensure this average is maintained; the respective department and the responsible faculty can decide on the format. If a TA feels overworked, she/ he can approach any DPGC member regarding this.

The following are some set of duties a TA can be asked to perform

- Conducting Tutorials
- Maintaining software and hardware and information related to academic activities in the department.
- Grading answer sheets, assignments and assisting in conducting vivas, seminars.
- Help students with difficulties: TA's should be available during regular office hours to clear doubts about the course. Limit should be Two hours per week.
- Arranging instruments/ reagents/ chemicals/ softwares/ hardwares related to course or labs.
- Attending Classes: If the TA is asked to attend classes by the instructor, then attending one hour of class accounts for one hour of TA.

The following are the working hours expected of a TA

- On an average the TA must work for eight hours per week (six days).
- Student's own research work (for thesis) or research with a faculty in his lab does not count in TAship hours.
- If a TA works less than average in some month then the work has to be compensated later. Overall average should be monitored over a semester rather than over a month.
- The provision to stop scholarship should be taken in case the work done during the entire semester is below the average. Renewal of assistantship every semester is subject to a good performance during the preceding semester.
- If the TA works in the vacations, then the average should be monitored over a month. TA's work in the vacations can't be counted towards the total work done in the next semester.
- AIMS can be used for approving/ disapproving the stipend of the TAs

In the case of a Research Assistant (RA), the rules and procedures are similar, except that the expected working hours per week may be higher than 8 hours per week.

5.2.2 Rules and Regulations Concerning MoE Students

The following are the rules and regulations guiding the students receiving MoE funded scholarships (rephrasing the relevant parts extracted from the MoE circular F.No.17-2/2014-TS.I, dated 18th February, 2015) and revised orders F.No.15-2/2019-TC dated 16th July, 2019 and IITH Senate resolutions

- **Eligibility:**
 - For M.Tech./M.Des.: B.E./B.Tech./B.S./B.Des. along with GATE/GPAT/CEED qualified/IIT B Tech with 8 CGPA
 - For Ph.D. Programs (Junior Research Fellow (JRF)/Senior Research Fellow (SRF) : Post Graduate Degree in Basic Science OR Graduate/Post Graduate Degree in Professional Course selected through a process described through any one of the following:
 - (1) Scholars who are selected through National Eligibility Tests - UGC NET including lectureship (Assistant Professorship) and GATE
 - (2) The selection process through National level examination conducted by MoE and its Agencies and Institutions such as UGC/IIT/IISc/IISER/IIIT etc.
 - (3) Direct admission to PhD for CFTI Students without GATE: B.Tech.Graduates from CFTIs with CGPA 8.0 or more, are eligible for applying to PhD programs at IIT Hyderabad. Students having CGPA lower than 8.0, need GATE qualification for applying to PhD Program.
- Sponsored and Self-Financed (for M Tech) Category of students including those in receipt of any other similar assistantship/scholarship/fellowship would not be eligible for assistantship/scholarship/fellowship. Further, the assistantship/scholarship/fellowship would be provided to the scholars on the basis of GATE scores above the prescribed cut-off level. B.Tech.Graduates from the IITs/CFTIs getting a CGPA score of 8 or above (on a scale of 10) would also be entitled to the assistantship without having to appear in GATE.

- The stipend of a research fellow/associate is exempted from the payment of income tax under Section 10(16) of the Income Tax Act, 1961.
- **DA and CCA:** JRFs, SRFs and /M.Tech./M.Des. will not be entitled to these allowances.
- **House Rent Allowance (HRA):** All research fellows and M.Tech./M.Des. students may be provided hostel accommodation wherever available and those residing in accommodation provided by the Institute will not be eligible for drawing HRA. Wherever the provision of hostel accommodation is not possible, HRA may be allowed to JRF, SRF as per Central Government norms applicable in the city/location where they are working. The fellowship amount may be taken as basic pay for calculating the HRA.
- **Leave and other entitlement benefits:** The JRFs, SRFs and /M.Tech./M.Des. are eligible only for casual leave (Senate approved 08 days of CL and Vacation leave of 15 days a year for Ph.D. and M.Tech. while for other funding agencies, it is as per the guidelines of the funding agency). Participation of any of these categories in any scientific event/ workshop in India or abroad will be treated as 'Duty'. The travel entitlement for JRF/SRF//MTech//M.Des. for participation in scientific events/workshops in India will continue to be the same as earlier, i.e. 2nd AC by rail. Maternity Leave as per Government of India instructions issued from time to time would be available to female candidates in all categories.
- **Bonus and Leave Travel Concession:** JRFs and SRFs and /M.Tech./M.Des. will not be entitled to these allowances.
- **Retirement Benefits:** JRFs, SRFs and M.Tech./MDes will not be entitled to these benefits.
- **Publication/Patent:** The results of JRF/SRF//M.Tech./M.Des. research work may be published in standard referred journals at the discretion of the Fellow or his Guide. It should be ensured by the Fellow that the assistance provided by the funding agency of Government of India is acknowledged in all such publications.
- Institute PDF (for scholars submitting thesis within 4.5 yrs) is proposed to be for MoE funded scholars only. It is not applicable to scholars from other funding (Project, PMRF, UGC, CSIR, DST INSPIRE etc.)

5.2.3 Guide Allocation Procedure

Each student will have a Project/ Research Supervisor, referred to as a Guide, from the faculty of the parent Department to which he/she is admitted.

The procedure for the selection of a guide: For the Master's program- As decided by the Department. For the PhD program- The students will be given a choice to choose his/her doctoral supervisor before the first course add/drop period of the semester in which he/she joins. If this choice is not exercised, then he/she will have to do it at the end of the joining semester.

To the extent possible, the preferences of the student in the area of research interest are taken into account and the student is given a freedom to choose his/her guide based on the area of research interest. Once the student joins, they are advised to consult their faculty advisors and DPGC regarding the same.

In addition, a co-guide from the same or other Department may be co-opted by the guide (in some special cases like external PhD students, the co-guide can also be from his own reputed research organisation or from outside IITH).

Guidelines for Selection of external supervisor (Non- IITH) as Co-Guide for regular PhD students:

- Steps:
 - (1) Consent from the expert (outside IITH)
 - (2) DC approval with justification
 - (3) Approval from Chairman, Senate through Dean (Acad)
 - (4) Once approved, the external expert is added to DC and noted by the academic section.
- The external to be selected as guide should be:
 - (1) A person of repute with a proven research record
 - (2) Having complementary expertise
 - (3) Collaborative nature of the work
 - (4) Exclusions: The external person should not be a guide/co-guide of the faculty concerned

- The co-guide should be selected before the formation of DC, or at least by the time of research proposal presentation. Adjunct Faculty and Visiting Faculty can be the Co-Supervisors jointly with any permanent faculty of IITH as the main Supervisor.
- A student may request for a change of guide only once in the entire tenure. Such change may come into practice on the recommendation of the HoD/ doctoral committee. The student will have to defend her/his new proposal. No extension of fellowship and duration due to change in the guide will be permissible.

5.3 Overall Degree Requirements for M.Tech./M.Sc./M.Des./M.A.

5.3.1 Credit Requirements

M.Tech.: For an M.Tech. degree, it is necessary to earn a minimum of the course credits 50- 52 (including English communication and industry lectures and will vary in that range for each branch) of which 50-55% will be course credits and the remaining thesis credits. While these credits are structured in a definite manner for 2 year-TA students, the 3-year RA program has more flexibility in the way these credits are distributed across semesters. A small portion of the credit requirements may also be electives where students can choose courses of their choice within the parameters defined (the M.Tech./ Ph.D. students are also permitted to register for UG level courses provided they are approved by DPGC. For M.Tech. students' maximum up to six credits of UG level courses are allowed).

M.Sc.: For an M.Sc. degree, it is necessary to earn a minimum of the course credits 67-72 (as stipulated by the respective science departments) of which 9 - 15 are thesis credits. A small portion of the credit requirements are usually electives.

M.Des.: For an M.Des. degree, it is necessary to earn a minimum of the course credits 52 of which 50-55% will be course credits and the remaining are project based credits including thesis credits. A small portion of the credit requirements may also be electives where students can choose courses of their choice from other departments with the approval of the concerned faculty supervisors. The students will take one project course for 3 credits for the first three semesters. In the final semester, students have to do a thesis project.

MA: The Masters program in Development Studies is a two-year full time program with a total of 60 credits spread over four semesters. In addition to the coursework and Dissertation, a two-month internship is also mandatory for the students. Internships will be of a duration of two months during the summer after the second semester (May-July). Internships carry a worth of 6 credits. The grading will be based on the inputs received by the concerned person within the organization, under whose supervision the student has interned.

5.3.2 Thesis/Dissertation

M.Tech.: At the end of the first semester, after the allocation of the guide, the student in consultation with the guide will choose a project topic for the thesis. In the second semester, he/she is expected to pick courses relevant to this thesis. The full time work on thesis will commence soon after the completion of the second semester (after first semester itself for RA students). This thesis work carries credits and evaluation at the end of each semester is done by a committee of at least two members beyond the guide/co-guide. This committee is selected from amongst faculty of IITH or scientists from reputed outside Organizations/Institutes. A faculty member of IITH outside the parent department will act as Chairman of the committee. At the end of project work, a dissertation is to be submitted to the institute to meet the graduation requirements. This dissertation needs to be accompanied by a plagiarism check report.

M.Sc.: The thesis credits may be spread over 2 or 3 semesters and is pursued along with other courses. An evaluation at the end of each semester is done by a committee of at least two members beyond the guide/co-guide. This committee is selected from amongst the faculty of IITH or scientists from reputed outside Organizations/Institutes. At the end of project work, a dissertation (soft copy) is to be submitted to the institute Library to meet the graduation requirements. This dissertation needs to be accompanied by a plagiarism check report.

M.Des.: The students will take one project course for 3 credits for the first three semesters. In the final semester, students have to do a thesis project with a dissertation work. Thesis is 12 credits; dissertation is 3 credits.

M.A.: Students will typically begin working on their dissertation in the second year of the program, although they can begin thinking about it earlier as well. For an M.A. dissertation, it is generally expected that students would select a specific topic, and engage with an extensive review of the literature on the topic, or analysis of related data (either primary or secondary). The thesis is typically prepared in consultation with the thesis supervisor. The supervisor will constitute the M.A. Dissertation Committee, which will consist of the supervisor and one faculty member within the department as the subject expert. The MA dissertation should not be less than 8000 words. There is no upper limit for the dissertation. Prior to submission of the dissertation, the student is required to make a pre-submission seminar in the department on a mutually agreeable date. This will be an open seminar presided by the M.A. Dissertation Committee. Comments and remarks coming from the Committee need to be incorporated into the thesis. One hard copy and one soft copy in a document format must be submitted to the Committee.

5.3.3 Maximum Duration

Generally, a student is expected to complete the requirements for the Masters degree in two years (3 years for MTech - RA category). A maximum of one additional year is allowed to the student for completing these requirements. The following are some rules guiding the duration of study:

- The students may not be eligible for hostel accommodation beyond their scheduled course period (2-years for all Masters programs except M.Tech. RA; 3-years for M.Tech. RA)
- The summer semester will not be considered as a registered semester.
- A semester when a student has been granted a semester withdrawal or granted leave will not be considered as a registered semester.
- When a student is suspended for one or more semesters on disciplinary grounds, the student status should be called Disciplinary Withdrawal period (DW). Time spent in DW status will be counted towards the total period permitted for completion of the degree.

5.3.4 Termination

The enrolment of a student to the institute will lapse after the maximum permissible semesters. Hence, a student who is not able to complete the graduation requirements within the maximum permissible time will deem to be automatically terminated from the program. Students facing disciplinary action for any serious offences (example ragging) may also face premature termination from the program if so recommended by the disciplinary action committee.

A student whose Program is terminated may appeal to the Chairperson, Senate, for re-reinstatement in the Program. In cases of termination due to inadequate academic performance, the student should clearly explain causes for the poor performance, including how those causes will not adversely affect her/his performance in the future. The Senate shall take a final decision about reconsideration of termination after considering all available inputs; the termination of the student remains in effect till otherwise recommended by the senate.

If MTech/MSc/MDes, student accumulates two fail (F) grades during the course work, she/he will be terminated as per the exit policy.

Students who do not register for more than 2 consecutive semesters without information/prior approval will be terminated. However, the student may appeal within one month from the date of termination notice.

5.4 Overall Degree Requirements for Ph.D.

5.4.1 Template for Ph.D. Degree

The following is the template for a regular Ph.D. program at IITH:

Admissions

- Shortlisting Criteria:
 - Departments can decide their own shortlisting criteria.
 - Eligibility should be first class in qualifying degree for all engineering and science departments. For the LA department, the eligibility can be 55% in the qualifying degree.

- Direct admission to PhD for CFTIs Students without GATE: Students graduated (B.Tech.) from CFTIs with CGPA 8.0 or more, are eligible for applying to PhD program at IIT Hyderabad. Student having CGPA lower than 8.0, needs GATE qualification for applying to PhD program
 - The shortlisting criteria should be higher than eligibility criteria.
 - The shortlisting criteria for Direct PhD should be higher than those for regular PhD.
- Conversion Criteria:
 - For B.Tech. students, the conversion should be based on 6th semester CGPA and this should be done before the start of regular MoE Ph.D. interviews/counselling for the next semester.
 - For M.Tech./M.Des. students, the conversion should be based on 2nd semester CGPA and this should be done before the start of regular MoE PhD interviews for the next semester.
 - For M.Sc. and M.A. students, the conversion should be based on 3rd semester CGPA and this should be done before the start of regular MoE PhD interviews for the next semester.
 - For all the conversions, CGPA should be 8.5 or above for Gen/Gen-EWS candidates and 8.0 or above for SC/ST/OBC Candidates.
 - All the conversion has to be done before Ph.D. regular interviews, so that the remaining seats shall be filled, as per Government norms.
- Admission Frequency:
 - Admissions for PhD program to fill the MoE, Project and External seats will be done only twice a year for all departments together and no ad-hoc admissions in the middle of the semester will be taken up.
 - For CSIR/UGC/Inspire, etc. (with their own fellowship), who are Not-Institute-funded may be admitted anytime, subject to meeting the selection criteria.
 - 'Exceptional candidates' to be admitted for PhD program at any time of the year for the Project funded and FIRST PhD students. They will be considered as admitted in January/July session as the case may be.

Start of the Program:

- The admitted students should join 15 days before the commencement of classes. As soon as the students join, the department will organise an orientation program, wherein the faculty who are interested to take PhD students that year will interact with the students and explain their area of research and projects that they are planning to offer that year.
- The students will be given a choice to choose his/her doctoral supervisor before the first segment add/drop period of the semester in which he/she joins. If this choice is not exercised, then he/she will have to do it at the end of the joining semester.

Course work, Comprehensive exam an exit option:

- The students who join Ph.D. program with M.Tech./M.Des./M.Sc./M.A. degree should do a minimum 12 credits of course work.
- For direct PhD (with B.Tech. degree), who have registered in Engineering departments; need to complete 24 Credits of course-work.
- For M.Sc. Degree, who have registered in Engineering departments; need to complete 18 Credits of course-work. While those M.Sc. candidates who have registered for Ph.D. in Science departments need to complete 12 credits of coursework. Those MSc students who registered in Engineering Dept. wishes to opt for dual degree (MTech + PhD), he/she should complete minimum of 24 credits of course work as suggested by DC.
- Students from IITs/IISERs/IISc joining PhD program with a master degree will be allowed for waiver of 06 credits during their PhD course work, if DC recommends.
- The student should secure a minimum of 7.0 CGPA at the end of the course work to continue in the PhD program.
- Every PhD student should support the department through a Teaching Assistantship (TA) for 8 hours a week, as suggested by the department.
- From the 2020 August batch, all PhD students have to give a comprehensive examination:
 - (1) The student has to attempt the comprehensive examination within 12 months of joining.
 - (2) The students need to achieve a minimum CGPA of 7.0 in coursework to be eligible for the comprehensive viva.

- (3) After the completion of the course work (at least 75% of credits), student is eligible for comprehensive evaluation.
- (4) If he/she fails to do it in the first attempt, he/she can attempt it again after a minimum of 1 month and within a maximum of 3 months after the first attempt. If he/she fails the second time, the student can choose an exit option (mentioned below
- (5) Department can decide whether written or oral or both, for first comprehensive and also for second comprehensive (for those students who could not clear it in first attempt). Written exam duration is decided by the department. The details have to be shared with the Academic section. Every PhD student needs to be informed about Comprehensive examination rules of their particular department as soon as they are admitted.
- (6) After passing the comprehensive viva, the student has to present the research proposal seminar (RPS) within 3 months, and there will be no pass/fail in the research proposal seminar. RPS for regular and direct PhD students should be within 18 months of registration. The RPS is open to the whole institute. There will not be a second RPS.
- Comprehensive and research proposal seminar should not be conducted together.
- Original work should be carried out at least partly under the supervision of a research guide from among the faculty members of IIT Hyderabad and defended in the form of a thesis.
- NPTEL courses: For registration to NPTEL and other online courses, these courses have to be first approved by the DC. DC should evaluate the contents and level of the respective course before approving. Conduction of Examination and award of the grade, have to be done by IIT Hyderabad Faculty.

Waiving-off of the residential requirement for External PhD Registrants:

- Residential requirements can be waived off by the DC for external PhD students on a case to case basis. They may be allowed to do NPTEL courses or online courses being offered by the department on a case to case basis for a certain number of credits. IITH Faculty will conduct an additional examination for the external courses taken by the candidates, and the final Grades to be awarded by the IITH Faculty.

JRF to SRF Conversion:

- In general, PhD lasts for up to 5 years, the first 2-year period a scholar is called a Junior Research Fellow (JRF) and the next 3-year period scholar is referred to as Senior Research Fellow (SRF). The scholar's JRF-SRF upgradation has to be done in the presence of the committee members. Upon successful completion of the conversion from JRF to SRF only, the scholar's JRF fellowship will be upgraded to the SRF fellowship amount. Scholars have to follow the respective funding agency guidelines and formats in this regard.
- Committee members for JRF to SRF conversion for MoE scholars-
 - (1) Guide/Supervisor
 - (2) External Member (can be a faculty from the other department, if a faculty wishes, he/she may also involve an examiner from outside IITH). However, the honorarium for the external will be paid from the faculty fund.
 - (3) Head of the Department (In case HoD is the Guide, or any other Professor from the department)
- For students supported by other funding agencies, their respective norms prescribed for JRF to SRF conversion will be followed.

Fellowship:

- The fellowship amount for all regular MoE scholars is granted as per the MoE order no. F.No.15-2/2019-TC dated 16th July, 2019 and IITH Senate resolution.
- For other Govt./Industry funded scholars (CSIR/DBT/INSPIRE/PMRF/TCS etc.) the fellowship amount along with any other incentives/ contingency grant etc. will be as per the guidelines of the funding agency issued from time to time.
- For the project PhD students who are converted to MoE PhD students after he/she has been supported in a project for 2.5 years, the fellowship will be provided for a max. of one year or till submission of thesis whichever is earlier. This period may be extended for a maximum period of 3 months in exceptional cases on DC recommendations. The student should have at least one accepted Scopus/Web of Science/MatSciNet indexed paper by the time of conversion. For this period, the fellowship amount will be decided based on the financial situation of the institute.

Eligibility Criteria guidelines for Institute Support for Project Ph.D. Students:

- S/he should have minimum 2.5 years of support as on application date & should be SRF
- Minimum 1 Journal article (in scopus or web of science indexed; 1st Author or equal contribution authorship) or 1 Patent application (filed)
- Only For CSE Dept: Minimum 1 Journal/Conference article* (in scopus or web of science indexed; 1st Author or equal contribution authorship)
- For Conference Article: Should be published in a proceeding with page number given.
- Not more than 1 project student per faculty will be eligible for such support
- Once approved, the following will be applicable:
 - (1) The approval will be effective from the date of approval
 - (2) Approval will be for 1 year
 - (3) After 1 Year, if DC recommends, then some extension can be given (3 months at the maximum).
 - (4) These project Ph.D. students are not eligible for the institute post-doc facility.
- MoE Students who submit their PhD thesis within 4.5 years would get a postdoc fellowship amount as decided by the Institute per month for a max. period of 6 months.

Doctoral Committee (DC) Constitution and DC Meetings:

- The Doctoral Committee (DC) constitution:
 - (1) Chairperson should be either external member or a senior faculty of the own department or the HOD,
 - (2) Guide will be the Convener of the DC.
 - (3) There will be two other members of DC, one will be internal and another will be external member. If a suitable external member from other departments cannot be found, then the external member can be from the same department but from a different specialisation.
- DC formation should be completed within 1 month from the guide allocation.
- DC meeting for the PhD students should be held every year for the first 3 years and subsequently, every six months until 5 years. Beyond 5 years, DC meetings have to be conducted every 3 months and an extension need to be sought, if required, in each of these DC meeting for 3 additional months.

Support to the PhD Students:

- A PhD student can get support of a prescribed amount as decided by the institute from time to time to attend two domestic conferences. (For details visit FAQs document in the website)
- PhD students will be provided with a support of a prescribed amount as decided by the institute from time to time for attending an overseas international conference, only for one time during the PhD period. The student should have completed the course work and comprehensive examination and should have at least one accepted paper in Scopus/Web of Science/MathSciNet indexed journal before availing this support. (For details visit FAQs document in the website)
- The doctoral fellows with their own fellowship (CSIR/NBHM/UGC/Inspire etc.) will be provided a prescribed amount as decided by the institute from time to time for conference travel.
- Every MoE PhD student will be provided with a bachelor accommodation on the campus. In case married student accommodation is available on the campus, it will be provided to married PhD students. However, if it is not available HRA will be paid. If any student prefers to stay outside the campus, s/he will not be paid HRA.
- If the research progress is unsatisfactory, supervisor will call for Doctoral Committee (DC) to evaluate the progress. If DC finds the progress unsatisfactory, an appropriate time interval (minimum of 3 months) will be set to improve the performance. If DC finds that the progress still remains unsatisfactory, registration will stand terminated.
- An MoE funded PhD student is eligible to convert to SRF (senior research fellow) after two years as a JRF (Junior Research Fellow).

Additional Rules for external/industry sponsored PhD

For the following rules are applicable in addition to the above mentioned rules:

- The Program is aimed at candidates from national research laboratories/ reputed industrial organizations where research work can be carried out.

- The guide may be allotted at the beginning. Nevertheless, it is recommended that the procedure outlined above for regular PhD students should be followed.
- No stipend will be paid to the student; however, he/ she may be employed in a project, full or part time.
- Candidates from reputed research organizations may have a co-guide from their research organization

Waiving-off of the residential requirement for External PhD Registrants:

- Residential requirements can be waived off by the DC for external PhD students on case to case basis. They may be allowed to do NPTEL courses or online courses being offered by the department on a case to case basis for certain number of credits. IITH Faculty will conduct an additional examination for the external courses taken by the candidates, and the final Grades to be awarded by the IITH Faculty.
- All other terms and conditions for external/ industry sponsored scholars will be at par with the regular MoE scholars.

5.4.2 Thesis Submission and Evaluation Guidelines

- *Pre-requisite for submission of PhD thesis:* The student must have two Scopus indexed publications (accepted or publications) to be eligible for the submission of doctoral thesis. Out of the two publications, at least one should be in a Journal (exception for CSE department: two conference papers from their list of standard conferences are also permitted). Two filed patents are considered to be equal to one Journal paper, contents (data and results) of the patent should be included in the thesis. However, 'Idea patent' or 'Concept patent' will not be considered. In such cases, apart from patents, publication of at least one peer reviewed Journal paper (Scopus/ Web of Science, indexed) is mandatory for submission of thesis.
- *Anti- Plagiarism policy (Similarity Index report)*
 - 1) The respective doctoral committee (DC) needs to approve the Similarity Index report before the submission of the thesis.
 - 2) In case student is not the first (or equal contribution) author and there are other contributors, then the student must get a declaration signed by the supervisor(s) that the work appeared in his/her thesis is solely mainly performed by the submitting student and the other authors will not take credits for the same text (appeared in his/her thesis), when he or she submits the thesis.

The full text of anti-plagiarism policy is available as **Annexure A13**

- *Open colloquium:* On completion of the doctoral research the student has to give an open colloquium. As the name implies it is open to the entire institute. The doctoral committee and the guide will have to be present in the Colloquium. The draft will be sent to the doctoral committee at least two weeks before the Colloquium. The student will have to incorporate the suggestions that come from the Open Colloquium. The revised thesis meant for sending to the examiners should be submitted within one month of the successful completion of Open Colloquium. **If any student fails to submit the revised thesis (if recommended) within a month after OC, the earlier submitted version will be sent to the reviewers].** Checklist listed below:
 - (1) Soft copy & Hard copy of synopsis (8-10 pages) Soft copy
(File name should be - first name of scholarSynopsis_department)
 - (2) Soft copy of draft Thesis by email
(File name should be - first name of scholar_thesis_department)
 - (3) Similarity Index declaration form
 - (4) List of Publications through Guide
 - (5) First page of Two Scopus/WoS/MatSciNet indexed journal or conference publications, which are part of the Thesis (Please attach the first page of the publications. In case it is recently accepted, but not published yet, please attach copy of acceptance)
 - (6) List of examiners (at least 8- Professors and Associate Professors) signed by the Supervisor and HoD in a sealed cover
 - (7) Thesis evaluation option (A or B) form

The OC request along with the above checklist should reach Acad-PhD office minimum 7 days before the scheduled date of OC. Synopsis can be modified upto 7 days after the OC after which it will be sent to the external examiners.

- *Extended synopsis:* The student will have to submit an extended synopsis (8-10 pages) that will be sent to the external examiners. The synopsis should not exceed 10 pages.
- *External examiners/reviewers:* The guide will have to submit a list of 8 external experts to the office of the Dean Academic forwarded through the HOD. The list may include scientists having 10+ years of experience in R&D labs who have guided at least one PhD Scholar.
- *Opting for examiners/reviewers from Abroad:* The guide may opt for examiners/reviewers from abroad. However, this is not mandatory.
- *Choosing the examiners:* The Dean Academic will choose the two examiners (for option A) or three reviewers (for option B) from the list provided by the thesis supervisor.
- *Defence pattern and examination committee:* The defense will be open to all followed by closed door Q&A. Two patterns are suggested for the conduction of thesis defense:

Option A - The viva voce will be held within two months of submitting the thesis to the external examiners. The extended synopsis will be sent to two external examiners. After reading through the extended synopsis if they agree to be in the examination committee and to be present during the defense in person, the thesis will be sent to both. If any of them refuses to be in the examination committee after reading the extended synopsis, the Dean Academic will contact other examiners from the list submitted by the thesis supervisor. The thesis will be sent to the examiner as and when one agrees to be in the examination committee. The examiners will not be asked to submit a written report. The supervisor will schedule the defense date in consultation with the examination committee. In this case the final examination committee will consist of the thesis supervisor(s), both the external examiners who agreed to review the thesis, one internal examiner, and Chairman who is from outside the department. Any Faculty of IITH with one year of service may be appointed as Chairman.

Option B - The extended synopsis will be sent to three external reviewers. After reading through the extended synopsis if they agree to review the thesis, then the thesis will be sent to all (3 reviewers). If any of them refuses to review the thesis, the Dean Academic will contact other examiners from the list submitted by the thesis supervisor. The thesis will be sent to the reviewer as and when one agrees to review the thesis. The reviewers will be given 2 months' time to submit a report. The point wise action taken on the contents of the reports furnished by the external reviewers have to be submitted to the Acad (PhD) section. Once two positive reports are received, one of the reviewers (nominated by the Dean, Acad) will be invited to attend the thesis defense. Subsequently, the defense date can be scheduled by the guide in consultation with the reviewer. The report submitted by the other reviewer will be given to the external examiner and the external examiner may even ask questions based on the reviewer's report. In this case, the final examination committee will consist of the supervisor(s), one external examiner, one internal examiner, and Chairman who is from outside the department. Any Faculty of IITH with one year of service may be appointed as Chairman

- *Choosing the exam pattern:* The choice of selecting the exam pattern remains with the student. The student 'may' consult with the thesis supervisor for making a choice.
- *Preparing the thesis:* The thesis must be prepared in a format prescribed by the Institute and a soft copy of the thesis must be submitted to the library for archiving.
- It was decided that the similarity report will be submitted to the DC. The DC will be the final authority to accept the thesis, check for plagiarism (if any) and submit its recommendations to the Acad office in the prescribed format (declaration signed by the scholar and the DC).
- *Chairman:* Any Faculty of IITH with one-year experience outside the parent department of the candidate may be nominated as Chairman.
- PhD Defence date will be incorporated on the graduation certificate. This is applicable from 31st October 2020 onwards.

5.4.3 Maximum Duration

- The PhD student (any funding) is expected to submit the thesis within 5 years after joining.
- The max. duration permitted for PhD program (any funding) will be 6 years for regular students and 7 years for external students, beyond which the registration will be cancelled.
- In exceptional cases, based on strong justification, a request for extension may be considered on the recommendation of DC, on a case to case basis. However, the extension should not exceed a 3-month period at any one time, and based on subsequent review meetings it may be extended further but only up to a max. period of 7 years from the date of registration, beyond which no extension can be granted by the DC.
- No accommodation will be provided on the campus beyond 5 years from the date of joining.
- No stipend will be paid to the student after five years

5.4.4 Termination & Exit Option

The enrolment of a student to the institute will lapse after the maximum permissible duration. Hence, a student who is not able to complete the graduation requirements within the maximum permissible time will be deemed to be automatically terminated from the program. The Senate may approve an extension of duration on a case by case basis. However, the termination of the student remains in effect until such extension is approved by the Senate. If extension is approved, the student is expected to complete the registration and fee related formalities till the completion of the program. Continuation of hostel accommodation in the case of such extension is not assured and subject to availability.

Students who do not register for more than 2 consecutive semesters without information/prior approval will be terminated. However, the student may appeal within one month from the date of termination notice.

In addition, the following conditions will also warrant termination of a student from PhD program:

- If the student obtains a CGPA below 7, at the end of the coursework.
- If the student accumulates two or more Fail (F) grades during the course work.
- If the research progress is unsatisfactory, supervisor will call for Doctoral Committee (DC) to evaluate the progress. If DC finds the progress unsatisfactory, appropriate time interval (minimum of three months) will be set to improve the performance. If DC finds that the progress still remains unsatisfactory, registration will stand terminated. However, DC may recommend for award of MS degree.
- Scholar who fails the Comprehensive examination (two subsequent attempts, as per existing policy) may choose an exit option (listed below) and submit the request to Acad office in the prescribed format:
 - (1) MS degree by Coursework – on successful completion of course work and getting minimum prescribed CGPA (7) within the timeline fixed.
 - (2) MS degree (Master by Research) – Prior approval of prospective Guide required for opting this conversion. After conversion to MS program, he/she will receive a scholarship equivalent to existing MTech fellowship (as per norms of MoE) from the date of second Comprehensive exam. Student needs to have a minimum 7 CGPA in the required course work and conduct his/her research and submit the thesis. He/she may be awarded degree only on acceptance of MS Thesis and successful completion of viva-voce examination, evaluated by the competent evaluation committee. Student needs to spend a minimum of 2.5 years (including course work duration) in institute for Direct PhD and 2 years for PhD post M Sc/M Des for the exit option to be exercised. DC may recommend the exit with MS degree, subject to meeting criteria of 24 credits for the MS degree.
 - (3) Exit without any obligation or degree

6. SPECIALIZED PROGRAMS

6.1 M.Tech. in Data Sciences (MDS)

Since August 2018 semester, CSE department has been offering a new M.Tech. program known as M.Tech in Data Science (MDS). It is a self-paced program of 48 credits that can be completed over 3-5 years. It is equivalent to regular M.Tech. Program, and upon completion, the student will get the degree "M.Tech. in Data Science" from the CSE department of IITH. The MDS graduates are not eligible for campus placements, because the Program is meant for working professionals who are already in the industry. It is expected that they contribute to the Data Science team of their current organization after completing the Program.

Coursework and classes:

- A student enrolled in the MDS Program will do 24 credits of coursework in the first two years. In the third year, they would do two Capstone projects of 12 credits each.
- Students also have the option of varying the number of courses in different semesters and completing the course requirement in 2-4 years (with one additional year for projects).
- The classes will be held over the weekends or other timings suitable for working professionals. Typically, there will be two classes per week, each of 3-hour duration. Currently, we use Vidyo video conferencing system to conduct online (live) classes over the weekends. As a backup, we also provide polycom service where students can join using our toll-free telephone number.

Exit option (Executive M.Tech. in Data Science):

- If a student is not interested in doing the 24 credits of Capstone projects, then he/she can graduate with the Executive M.Tech. in Data Science (EMDS) degree by completing the coursework only. Note that unlike MDS, the EMDS degree is not equivalent to a regular MTech degree.

Eligibility, Admission Process and Fee structure:

- Eligibility: The candidate must have a minimum 2 years of work experience in Industry and be employed in Industry at the time of applying. The candidate must have a B.Tech. /B.E. degree in CS/ EE/ IT/ ECE, or an MCA, an M.Sc./ M.S. degree in CS/ IT, and have an excellent academic record.
- Selection Procedure: Candidates must fill an online application. Shortlisted candidates will have to appear for a written test and/ or interview. Prior research exposure and/or industry experience in areas related to data science will be considered a plus. The final selection of the candidate will be based on performance in the written test and/ or interview, and any other criteria deemed suitable by the admission committee.
- Program Fee: The fee for applying to the program is ₹500/- (irrespective of caste & gender). There is a registration fee of ₹15,000 per semester. The course fee is ₹25,000 per credit for the courses. For the Capstone project, the fee is ₹12,500 per credit. For all the 48 credits the total fee is ₹9 Lakhs. For backlog courses if the student registers even for one course s/he will have to pay the semester fees (₹15,000).

More information can be found on the website of the CSE department.

6.2 Online MTech and MDes Program

Fee Structure

- Fee structure of Online M.Tech. program will be similar to the fee structure of MDS (by CSE Dept.) program i.e., Rs.25,000/- per course credit & Rs.12,500/- for thesis credit & a semester fee of Rs.15,000/- per semester, for candidates other than those from Govt. organizations.
- Participants from Govt. organizations (Lab/Industry) irrespective of Central/State Govt. will be charged a fee of Rs.12,500/- for each course/thesis credit & a semester fee of Rs.15,000/- per semester.
- The fee for IITH Alumni will be Rs. 12,500/- per credit (course credits and thesis credits) and a semester fee of Rs.15,000/- per semester, however they must have 2 years of prior experience. A maximum of 10% of the number of MoE seats allocated to a department can be allocated to alumni.
- The students will have the flexibility of completing the course credits (as per approved curriculum) within 3 years, while for thesis credits they must complete it within one year. Total duration being a maximum of 4 years to complete the Program.

Exit Option:

- It is recommended that the candidates should achieve a minimum CGPA of 7.5 in course credits to do the thesis. If a student fails to achieve this, she/he can take the exit option (Executive M.Tech. Degree or PG Diploma for M.Des.) after successful completion of the 24 credit course works.
- The candidates with CGPA of 7.5 or more in course credits, who wishes to exit from the program at the end of one year can also do so with an Executive M.Tech. (PG Diploma in case of M.Des.).

Projects after course work:

- Project can be done at industry. The student must select a guide from a guide from IITH and can have a Co-guide from industry. The candidates will have the liberty to choose any faculty from the department as guide.
- If the industry does not have the facilities for Project work, then the candidates can opt for a computational project.

Eligibility:

- For MTech
 - First class in the relevant degree (BE/BTech or equivalent degree) with 2 years' industrial experience post qualification.
- For MDes
 - First class in the degree (BE/BTech/BS/BDes/BArch or equivalent degree) with 2 years' industrial experience post qualification, OR
 - Passed with minimum 55% of marks in a 4 years Bachelor's degree in Arts/Humanities or equivalent degree with 2 years' industrial experience post qualification, OR
 - Passed with minimum 55% of marks in 5 years Integrated Master's degree in Arts/Humanities or equivalent degree with 2 years' industrial experience post qualification

6.3 Joint Ph.D. Program with Swinburne University

6.3.1 For batches prior to July 2021

Who can apply:

The following students are eligible to apply for this program:

- Students who are already enrolled in a MTech or PhD program at IITH.
- Postgraduate and undergraduate students at any University in India (including IITH) interested in doing a PhD in specified areas of collaboration with IITH. Students have to meet the entry requirements of both Swinburne and IITH as described below.

Selection of candidates

Students will be required to meet the academic and English language entry requirements for HDR programs at both IITH and Swinburne. For Swinburne, the minimum entry requirements are:

<http://www.swinburne.edu.au/research/research-degrees/degrees-programs/phd-doctor-of-philosophy/>

Additionally, an interview will be conducted to determine the suitability of the candidate for admission and for scholarship. The Interview Panel will comprise of the PVC IRE&D and an ADRD from Swinburne, the two IITH equivalents, and one supervisory team member from each institution. The interview can take place through Skype or other electronic means.

Supervision

The supervision team will include at least one supervisor from each institution. Supervisors must be accredited to supervise at the appropriate level by their institution according to their current regulations.

Progress reviews

Student progress reviews will be performed in accordance with applicable academic policies, procedures, rules and regulations of Swinburne and IITH. Current regulations are described in the attached documents:

- For Swinburne: Research Training Statement of Practice (subject to change);

- For IITH: Doctoral Program at Indian Institute of Technology Hyderabad (subject to change).

Annual progress reviews will be conducted by the institution where the student has spent the majority of time in that year. The regulations of that institution will be applicable and the Progress Review Report will be sent to the partner institution for noting by the appropriate committees. For Swinburne the appropriate committee is the HDRC.

Additionally, milestone reviews will take place at confirmation of candidature, mid-candidature and pre-submission stages for HDR students, as detailed in Swinburne's Research Training Statement of Practice.

Termination

A student who is found to be making unsatisfactory progress or has not passed two consecutive progress reviews, irrespective of which institution has or had conducted the review, will be proposed for termination. If a student is not progressing satisfactorily the supervisory team may request an early progress review.

Swinburne's At Risk process will be followed for terminating the student's candidature at Swinburne. The details are described in the attached Research Training Statement of Practice.

Scholarship extension

The scholarship duration for PhD is four years. In exceptional circumstances an extension to this period may be granted. The extension is for up to six months. For requesting scholarship extension, the student has to make an application to Swinburne and IITH on a prescribed form and obtain support from the supervisory panel.

Student visit to Swinburne

Students enrolled in the joint PhD will visit Swinburne for up to 12 months in total. Students are responsible for obtaining the required visas for travel and the compulsory Overseas Student Health Cover (OSHC) required for students studying in Australia.

Examinations

The student's PhD thesis will be evaluated according to the applicable regulations in both universities. The evaluation at Swinburne is by written examiner reports. Please refer to the attached copy of the Research Training Statement of Practice document (subject to change). The evaluation at IITH involves an oral defence (see the attached document, Doctoral Research at Indian Institute of Technology).

The composition of the examination committee will be determined by both universities based on the recommendation from the supervisors at IITH and Swinburne, and approval by the relevant university committees. The nominated examiners will complete the examination processes and requirements of both universities.

Testamur

Successful Partnered HDR program students will receive a double badged degree testamur from Swinburne and IITH. The words to be included on the Swinburne mark sheet will include: "conferred as a single degree under a Partnered HDR program between Swinburne University of Technology and Indian Institute of Technology, Hyderabad"

Publication of Thesis

Student thesis is to be deposited at both institutions in accordance with the regulations of both Swinburne and IITH for the degree of Doctor of Philosophy.

Graduation Ceremony

Swinburne and IITH will hold a joint graduation ceremony in India for students who pass the examination and are eligible for the joint award. This ceremony will be part of the normal IITH Graduation Ceremony and will be attended by the Swinburne Chancellor and Vice Chancellor (or their nominees).

As per SUT norms, written reports from two examiners (in consultation with the supervisor from SUT) are needed. The first needs to be local (India – as the home univ. is in India) and the second needs to be international (outside

India and Australia). Also, advisors should not have a conflict of interest with the examiners. This means it needs to be someone that the supervisors have not published within the past 5 years. The forms can be initiated and managed at the IITH end but nominated examiners meet the standard criteria.

Looking at this, the examination pattern fits into IITH Option B. The examiner list needs to be prepared in consultation with the supervisor from SUT.

Double badged degree:

A double-badged degree refers to a PhD or Masters by Research program offered jointly by Swinburne University of Technology and a partner institution. Candidates in double-badged degrees are enrolled at both institutions, are jointly supervised and receive one award, made jointly by Swinburne University of Technology.

Entry conditions and approval of candidature:

- Students will be required to meet the entrance and eligibility criteria of both Swinburne and IITH and submit a research proposal for candidature that must be approved by the relevant approving authority at both Swinburne and IITH.
- Suitable supervisor from each of Swinburne and IITH have been identified and have agreed to act as Supervisors for that person.
- Agreement has been reached between the two supervisors and the prospective student on the topic of research.

Student responsibilities:

- Tuition, amenities and services, travel expenses, insurance, accommodation etc. (Typically they will be covered by the scholarship).
- Students will have to pay tuition at home.
- The partner institution will waive the tuition for the duration of their candidature.
- Swinburne will meet 67% of the stipend when they are in India and fully fund during their candidature at Swinburne. IITH will fund 33% of the stipend when the students are in India.

The program committee:

The program committee will comprise 6 individuals. The committee will meet quarterly/twice a year.

- The chairperson of the committee will alternate between IITH and Swinburne
- Approve and manage the selection of students
- Approve the number of students who will visit Swinburne every year
- Approve the process of conducting exams
- Manage IP policy, student grievance, etc.
- The PC will report to the HDR committees at Swinburne and IITH quarterly

Termination:

21 Days' notice. Immediate if:

- A party makes deliberately misleading or deceptive statement in any reports.
- if a party is deprived of its power to award degree relating to partnered HDR program
- if a party ceases or threaten to cease, to carry on business as an educational institution.

Termination consequences:

- The support for the students will continue or transfer their candidature to another institution.
- Cease accepting enrolment for partnered HDR program.
- The non-defaulting party will have all rights to claim compensation for loss liability and costs incurred due to the defaulting party.

Disputes:

- In case of receiving a dispute notice, the management team must hold discussions, within 14 days to resolve the dispute.

- If the dispute is not resolved in 20 days of receiving the notice, the president of Swinburne and director of IITH must hold discussions within another 14 days to resolve the dispute.
- If matter is not resolved in 45 days, it must be referred to a mediator to be nominated by the President of the Institute of Arbitrators & Mediators Australia (Victorian Chapter)

The academy: Objectives:

- Provide research services by combining the research strengths of the Parties.
- Develop a high-quality research capability that will be used to enhance knowledge in various fields of scientific endeavour.
- Engage in strategic research of importance to India and Australia.
- The academy will be registered as a company under the companies act.
- IITH will provide the facilities required for the functioning of the academy at no cost.

The academy: roles:

- Will be headed by a CEO.
- Staff (manages, administrators, and researchers).
- Receive contributions.
- Enter into project agreement, and commercialisation.
- Provide scholarship to students.
- Maintain accounts.

Governance:

- Academy will have a board with: 4 from IITH and 4 from Swinburne.
- Chairperson of the board will be on rotating basis between IITH representative and Swinburne representative
- Nominate a secretary of the board.
- Directions and instructions related to commercialisation of IP
- Agree on terms of project between the academy, third parties and parties
- Approve the annual budget
- Appoint the CEO
- Appoint JVAC consisting of eminent researchers and academics (will have no power)

Publications:

- All publications produced by the Academy are to cite IITH and Swinburne in a manner approved by each Party.
- The Parties will use their reasonable endeavours to ensure nothing is done which might prejudice the Commercialization of Background Intellectual Property or Academy Intellectual Property
- Knowledge dissemination is to be encouraged.
- Academy's permission is required for publishing and the permission needs to be granted in 30 days.
- The copyright of a Student's thesis is owned by the relevant Student and vests in the Student

Developing the proposal

- Both institutions will invite expression of interest
- EoIs will be exchanged between the institutions to find mutual interest
- The students will be provided with range of research topics for joint HDR scholarship
- The total scholarship amount is capped at AUS \$3.6M for 5 years.

Transfer of funds

- Swinburne will transfer funds to IITH on quarterly basis. (Jan, April, July and Oct)
- IITH to provide list of HDR students continuing the program and the stipend level one month prior to raising the invoice.
- Swinburne will release the funds within 30 days.

Admitting the candidate:

- A suitable supervisor has to be identified from both IITH and Swinburne and an agreement has to be reached between the supervisors and the student on the topic of research.
- The student must meet the eligibility criteria of both institutions.
- The candidate will be interviewed jointly by IITH and Swinburne.
- Must submit a research proposal for the candidature that must be approved by the approving authority at IITH and Swinburne.

Students

- 20 PhD students per year will be selected (2017).
- Covers all areas of engineering, science and design
- Will visit Swinburne for up to 12 months
- The student must have completed 24 months of formal education in English
- The student has to pay tuition at IITH.
- Swinburne will pay 67% of the stipend when the students are in IITH and fully fund at the Swinburne stipend rate while they are in Swinburne
- IITH will pay 33% of the student stipend when they are in India

Students:

- The stipend will be for maximum four years
- The stipend will be at the prevailing IITH stipend rate while in
- India and at the prevailing Swinburne stipend rate while in Australia.
- Students are responsible for obtaining VISA and Health
- Insurance (except for the cover that is provided by SUT for all its students).
- Student travel not covered by Swinburne.

Call for application

- Promoted through website of IITH and Swinburne
- Both institution to work together for developing material for the webpages, marketing and promotion.

Who can apply?

- Students who are already enrolled in MTech or PhD @ IITH
- PG and UG students at any university in India; they have to meet entry requirements of both IITH and Swinburne.

Progress review and submission

- Annual progress review will be conducted by the institution where the student has spent majority of time in that year.
- The regulations of the institute where the review occurs will be applicable and the report will be sent to the other institution.
- Additionally, there will be candidature confirmation review, mid candidature review and pre-submission reviews.

Progress review and submission

- The composition of the examination committee will be decided by both institutions and approved by relevant committees.
- Minimum two peer reviewed journals and conferences (list to be provided by respective departments)
- The candidate has to deposit the thesis at both institutions.
- The successful students will be conferred a single degree under the partnered HDR program.
- IITH and Swinburne will hold a joint graduation ceremony.

The program review committee

- Swinburne
 - Pro-VC (Int. Research Engagement & Development)

- Pro-VC (Graduate Research & Research Training)
- Executive dean at faculty of science, engineering and technology
- Associate dean research and development faculty of science, engineering and technology
- IITH
 - Dean of academic program
 - Dean of research and development

The program review committee:

- To meet quarterly
- Quorum for meeting will be at-least 2 from each institution
- The chairperson of the PRC will alternate yearly between IITH and Swinburne.
- First chairperson from IITH
- A secretary to be appointed to take accurate minutes
- Secretary need not be a PRC member (in this case no voting rights)
- The chairperson will have a second voting in case of deadlock.
- Program committee to report to post graduate committees of both institutes.

Termination and dispute resolution

- The parties may immediately terminate the agreement by mutual consent in writing by giving 21 days' notice.
- The students who are already in the program may either be supported or transferred to the other institute.
- Disputes to be resolved within 21 days by relevant management units. If not resolved the president and director to meet within 14 days and resolve the dispute.
- Arbitration as per UNCITRAL in New Delhi

6.3.2 For July - 2021 batch onwards

- Previously the students were admitted first in IITH, and then depending on the interest of the supervisors, the students could apply for the fellowship (lateral entry model).
- In the new proposal, students are admitted from day -1 in the JDP. So informed, interested, and bright student can be attracted
- Other conditions (scholarship amount etc.) continue to remain valid.
- No. of students are 20 and not supernumerary. We have received 300 applications for this program
- The information concerning interested faculty will be shared with the SUT side for collaboration match-making
- The shortlisting process will be a multistage process comprising of:
 - Stage I shortlisting by IITH
 - Stage II shortlisting by SUT
 - Stage III shortlisting by IITH (if required to adjust the seat matrix)
- Final selection interview will be attended by the interested SUT faculty.

Eligibility:

- BE/BTech in the relevant branches of science/engineering with a CGPA of 8.5 (in 10-point scale) or equivalent for the general category (relaxation will be given for other categories as per the GoI norms). The applicants should have a valid GATE score. The GATE score may be waived for students from IITs and NITs.
- MDes/MSc/MTech in the relevant branch of design/science/engineering with a CGPA of 8.5 (in 10-point scale) or equivalent for the general category (relaxation will be given for other categories as per the GoI norms).

Entry requirements

Academic

- Eligible students must have completed B.Tech./M.Tech. in a relevant discipline with a final C.G.P.A of 8.5/10.0.

- Only those students having completed their preceding degrees- with English as the medium of instruction to overcome the requirement of IELTS and TOEFL.
- Students must meet the entry requirements of both Swinburne and IIT as described below.
- Swinburne academic requirements are covered here: <https://www.swinburne.edu.au/research/research-degrees/degrees-programs/phd-doctor-of-philosophy/required-standards/>

English

- IELTS
 - Minimum overall band of 6.0 (Academic Module) for Science, Technology, and Engineering, and no individual band below 6.0.
 - Minimum overall band of 6.5 for Business, Design, Psychology, Social Science and Arts and Humanities, and no individual band below 6.0.
 - IELTS test taken no longer than 24 months before submitting application, or;
- TOEFL (IBT)
 - A score of 79 (with a reading band no less than 18 and writing band no less than 20); or Pearson (PTE) 58 (no communicative skills less than 50) no more than 24 months prior to submitting their application
 - Have satisfactorily completed the Swinburne College English for Academic Purposes (EAP) Advanced level certificate at the postgraduate level (EAP 5: PG-70%)
- Others
 - Satisfactory completion the Swinburne College English for Academic Purposes (EAP) Advanced level certificate at the postgraduate level (EAP 5: PG-70%), or;
 - Successful completion of a total of 24 months (full time equivalent) of formal study where the language of instruction and assessment was English no longer than 60 months before submitting your application.

Focus areas

- Science, Engineering, and Technology
- Design
- Business (Not being considered for the coming admission cycle) and Law (doesn't exist at IITH)

Procedure for Admission:

- Students will be admitted specifically for the partnered Ph.D. program
- IITH will draft the admission flyer together with the SUT
- The selection process will consist of shortlisting followed by an online interview

Procedure for Supervisor Selection:

- IITH will collect information concerning the interested supervisors and share the details with the SUT counterpart
- SUT, in turn, will share the details with the staffs for the purpose of collaboration-matching
- The IITH-SUT counterparts will discuss and propose the research proposals
- A seminar may be held for facilitating the process for establishing a connection between the prospective IIT-SUT supervisors
- The agreed research proposal will be shared with the students
- Selection will be made by the students in consultation with the IITH and SUT supervisors.

Ph.D. supervision:

- Students are enrolled at Swinburne and IIT Hyderabad. Students will be able to visit Swinburne for up to 12 months during their candidature.
- Students are supervised by principal supervisors from Swinburne and IIT Hyderabad.
- Students will have access to facilities at both universities.
- Upon meeting the review and examination requirements from both institutions, the Ph.D. students receive a degree testamur each from Swinburne and IIT Hyderabad. Swinburne's academic transcript will specify that the Award is 'Conferred under a Partnered Ph.D. program between the Swinburne and IIT Hyderabad'.

Scholarships and financial assistance:

- IIT Hyderabad and Swinburne will provide Tuition Fee scholarships for a maximum of 4 years
- Students will be provided with scholarships when in India and equivalent to SUPRA when students are in Swinburne.
- Swinburne usually provides a Top-up per month for the registered students at IITH.

For more information, please visit:

www.swinburne.edu.au/research/research-degrees/degrees-programs/phd-doctor-of-philosophy

<https://www.iith.ac.in/iar/international-collaborations/>

6.4 Joint PhD Program with Deakin University

- Joint doctoral programs in a wide range of subjects/disciplines, including (but not limited to) Materials and Smart Manufacturing; Affordable Healthcare; Food, Environment, and Agriculture; Artificial Intelligence, Machine Learning and Data Science; Cyber Physical Systems; Infrastructure and Energy
- Students will be admitted from day-1 in the JDP. The enrolment in the JDP will remain valid for four years only
- Students entering with M.Tech. degree will be immediately enrolled in the program, while students entering with B.Tech. degree will be enrolled in the JDP after one semester (completing 12 credits out of 24 credits)
- The students will be paid a top-up scholarship of 150 AU\$ (for three years) in addition to MoE scholarship while in India. They will be paid AU\$28,620/year while at Deakin • The number of seats available is 10 (supernumerary).

Eligibility

- BE/B Tech in the relevant branches of science/engineering with a CGPA of 8.5 (in 10-point scale) or equivalent for the general category (relaxation will be given for other categories as per the GoI norms). The applicants should have a valid GATE score. The GATE score may be waived for students from IITs and NITs.
- M Des/MSc/M Tech in the relevant branch of design/science/engineering with a CGPA of 8.5 (in 10-point scale) or equivalent for the general category (relaxation will be given for other categories as per the GoI norms).
- At least 1 thesis guidance experience for IITH-Deakin JDP as per Deakin's regulation. According to the Deakin requirements, it is mandatory that the potential supervisor from IITH (and also from Deakin) should have guided at least one PhD student independently. Therefore, approval of senate is requested in this direction.

Principles of Program

- 4.1. The parties agree to establish a program for the co-supervision, exchange and assessment of HDR candidates. The principles set out in this clause will govern the Program. At Deakin, the HDR Policy and Procedures apply. At IITH, the PhD Ordinances and Regulations apply.

Admission

- 4.2 Candidates must meet the admission and entrance requirements of both IITH and Deakin including language proficiency and coursework requirements;
- 4.3 Candidates with M.Tech / MEng qualifications will be enrolled in the JDP from the day of the admission, whereas candidates with B.Tech. / BEng / BSc (Hons) will be enrolled in the JDP after the completion of the first semester and completion of the minimum 12 credits.
- 4.4 Candidates will be enrolled in the doctoral program simultaneously at each institution in accordance with each institution's admission and course requirements.
- 4.5 At the date of execution of this Agreement, Deakin and IITH's Doctoral Entry Requirements are set out respectively in the Higher Degree by Research (HDR) Admission, Selection and Enrolment Procedure and the IITH Ph.D Admissions regulations as mandated by the senate of the IIT Hyderabad . Both Institutions reserve the right to amend their respective doctoral entry requirements from time to time. However, such

changes in the entry requirements must be duly informed to the other institution. Deakin's HDR policies current at the date of this Agreement are available on the Deakin Policy Library at <https://policy.deakin.edu.au/home.php>. IIT Hyderabad requirements current at the date of this Agreement are available at <https://www.iith.ac.in/academics/phd/>

- 4.6 An applicant who has completed two (2) or more years (full-time equivalent) of their doctoral program is not eligible for selection into the Program.
- 4.7 Applicants who have already commenced a doctoral program at either IITH or Deakin must be in good academic standing at that institution when applying to and on selection into the Program.
- 4.8 The parties acknowledge that each party must comply with its own Trade and Sanctions Laws; each party will advise the other if Trade and Sanction Laws impact on any applicant to the Program or any Candidate registered in the Program under this Agreement.
- 4.9 An applicant selected into the Program will be enrolled as a full-time Candidate at each institution and will remain enrolled at each institution throughout the Program.
- 4.10 Each institution must maintain student records for the Candidate in accordance with its own Policies and provide copies to the other institution upon request.

Supervision

- 4.11 Members of the supervisory team are responsible for ensuring that the Candidate receives appropriate guidance and support towards successful completion of their course requirements, if any, and of their doctoral examination.
- 4.12 The lead Supervisor at IITH and Deakin will participate in any committee convened with respect to the Candidate's academic progress.
- 4.13 The Supervisor(s) must comply with the requirements of Deakin's HDR Supervision policy and IITH Senate Ruling.

Student Agreement

- 4.14 On selection of the Candidate into the JDP Program, the Candidate and the parties will jointly develop an agreement setting out the terms of the Candidate's participation in the Program. The Student Agreement will address the matters set out in clause Error! Reference source not found., must be approved in writing by each principal Supervisor named in the Student Agreement and must be executed by the Candidate, the lead Supervisor(s) and by an authorised officer of each institution.

Residency

- 4.15 A Candidate normally spends between three (3) to 12 months of the total period of study at each institution, subject to the approval by the Supervisory team. The institutions may agree to a greater or lesser division of time between them if they agree that it is in the Candidate's best interests. For the purposes of this clause 4.15, any period of time in which the Candidate is engaged in doctoral study as contemplated by clause 4.6 is included in the total period of study.
- 4.16 A Candidate must abide by the applicable Policies of each institution, and while in residence must abide by the Policies applicable to and have the same rights and privileges as are granted to other candidates in residence at that institution.
- 4.17 Each institution at which the Candidate is in residence must prepare with the Candidate a Work Safety Plan to cover the conduct of the Research Project at that institution, which must be approved by both principal Supervisors. The Work Safety Plan must identify any health and safety hazards of the Research Project, with specific reference to biosafety (including genetically modified organisms), chemical safety, field work, physical plant and process hazards and radiation; assess risk associated with the Research Project; and put in place appropriate control measures to minimise the assessed health and safety risks.
- 4.18 Each institution will provide the necessary documentation (where applicable) to enable the Candidate to make application for a student visa.

Fees

- 4.19 The Candidate must not be required to pay tuition fees (being fees charged to an enrolled Candidate for access to instruction and educational resources) to more than one institution at a time, although the

institution at which a Candidate is in residence may charge student fees (being student union and amenities fees) during the period of residency.

- 4.20 IITH will fund the Candidate with a stipend equal to the Indian Ministry of Education stipend for the duration of candidature excluding their residency at IITH.
- 4.21 Deakin will provide each Candidate
 - a full tuition fee waiver for up to four (4) years once the Candidate is admitted into the doctoral program at Deakin;
 - a top up stipend of \$A150.00 per month, for up to three (3) years, while resident at IITH and after the Candidate has successfully completed their PhD Research Proposal Seminar at IITH;
 - a stipend, equivalent to the Australian Research Training Program (RTP) rate (\$A28,600 per annum tax exempt indexed annually, 2021 rate), paid fortnightly, while resident at Deakin.

Benefits for Candidate

- 4.22 If there is a conflict between the Policies of the two institutions with respect to a Candidate's leave entitlements (including maternity, paternity and adoption leave), or intermission, a Candidate will be entitled to the most generous benefits, subject to the requirements of any external scholarship held by the Candidate.
- 4.23 Each institution must make available to Candidates the same access to support, benefits and infrastructure that it would apply to Candidates registered solely at that institution including, without limitation access to
 - its complaints processes; and
 - appropriate advocacy support whilst in residence at that institution.

Academic Progress

- 4.24 Each Candidate must satisfy the academic and other requirements of both institutions. These requirements will be identified in the individual Student Agreement Schedule.
- 4.25 Each Candidate will be assigned a Supervisory Team at Deakin and a Doctoral Committee at IITH.
- 4.26 If a Candidate does not satisfy the academic and other requirements of both institutions, an additional independent panel member will be invited to be a member of the Doctoral Committee to assist in the management of the Candidate's academic progress that complies with the requirements of each Institute.

Academic or Research Misconduct

- 4.27 A Candidate is subject to the Policies of both institutions with respect to academic and research misconduct. Any allegation of academic misconduct or research misconduct must be reported to both institutions and the parties must agree upon a process to deal with the allegation that satisfies the requirements of both institutions' Policies.

Student Agreement

- 4.28 Each institution's requirements for the doctoral examination including thesis examination and oral defence of the thesis will be set out in the Student Agreement.

Doctoral Examination

- 4.29 The procedure for submission, identification, and reproduction of a thesis, as well as authorisation to defend it, must comply with the Policies of both institutions. Both institutes reserve the right to amend this outline from time to time in writing with mutual agreement.
- 4.30 As part of the doctoral examination, a Doctoral Examination Committee (DEC) will be established at IITH. The Committee will consist of a minimum of the following representatives:
 - a) IITH lead Supervisor;
 - b) Deakin principal Supervisor;
 - c) Deakin Faculty or School HDR Coordinator or Nominee; and
 - d) IIT Hyderabad departmental or Non-departmental faculty
- 4.31 Each institution will confirm in writing to the other party that the Candidate has fulfilled all of their requirements to proceed to examination of the thesis. Only if the requirements of both institutions are met can the doctoral examination, including the nomination of examiners, be planned and organised.

Thesis Examination

- 4.32 The Candidate will be required to submit a single thesis to both institutions at the same time. The thesis must be written in English. If required, an abstract must be provided in the language designated by IITH.
- 4.33 A total of eight (8) independent and appropriately qualified examiners will be jointly nominated. All nominated examiners will be external to both Deakin and IITH.
- 4.34 The Dean (Academic) IITH and the Chair of the Thesis Examination Committee at Deakin, will select four (4) examiners but only three (3) examiners will be notified to examine the thesis to meet the requirements.
- 4.35 The Home Institution is responsible for all communication with the examiners.
- 4.36 The nominated examiners must meet the requirements of both institutions. At the date of execution of this Agreement Deakin's HDR Assessment Procedure and the selection of examiners requirements are set out respectively in the Higher Degree by Research (HDR) Assessment Procedure. Each Institution reserves the right to amend its respective doctoral entry requirements from time to time. However, such changes in the entry requirements must be duly informed to the other institution. Deakin's HDR policies current at the date of this Agreement are available on the Deakin Policy Library at <https://policy.deakin.edu.au/home.php> and at IITH's website.
- 4.37 The examination of the thesis must comply with the Policies of each institution. Examiners' reports must be provided in English.

Oral Defence of Thesis

- 4.38 The thesis will generate only one oral defence in English and only one (1) defence report in English.
- 4.39 The oral defence will be coordinated by the Lead Supervisors. The Lead Supervisors will arrange the date and location of the defence and will notify the relevant the Dean (Academic), IITH and the Chair of the Thesis Examination Committee, Deakin.
- 4.40 If the thesis is successfully defended, the institution at which the defence takes place will transmit a copy of the complete defence file to the other institution.
- 4.41 The doctoral examination must comply with the Policies of both institutions. After the requirements of both institutions have been satisfied, the outcome of the doctoral examination can be awarded.

Award

- 5.1 On the Candidate satisfying all requirements and obtaining all internal approvals for the conferral of the degree at each institution, each institution will award the Candidate with an HDR degree.
- 5.2 A decision by one institution not to confer an award does not preclude the other institution from conferring the award, however that award must not refer to this Agreement or the Program or imply that the other institution has approved the conferral of the award.

Testamur

- 5.3 Subject to clause 5.2, two separate testamurs or certificates will be conferred on a Candidate who has successfully completed the Program and each must note that the doctoral award is conferred under a jointly supervised HDR program between the parties.

Accreditation and Cooperation

- 5.4 Each party is responsible for maintaining the registration and accreditation of its doctoral award, it being the parties' shared intention that the award will be recognised in both jurisdictions.
- 5.5 Each institution will provide reasonable assistance to the other institution to enable it to comply with any request for further information made either by the other institution (acting reasonably), or by any governmental agency overseeing accreditation and regulation of doctoral programs.

Student Agreement

The Student Agreement must include at a minimum:

- a) designation of a Home University and a Host University;
- b) the appointment of the Lead Supervisors;

- c) a description of the research topic;
- d) facilities and specialised equipment required to undertake the research and arrangements for their provision;
- e) the language of instruction at each institution;
- f) identification of degree requirements beyond the thesis (e.g. postgraduate courses, research training, or comprehensive examinations);
- g) requirements for confirmation of Candidature;
- h) responsibility for ethics training and approvals and for risk management;
- i) financial details, including payment of tuition fees and student fees, and any provisions for the financial support of the Candidate by way of scholarship, stipend or travel grant;
- j) provisional program for division of time between Deakin and the IITH;
- k) requirements for health and travel insurance and visas;
- l) provisions for ownership and licensing of Intellectual Property and for publication;
- m) leave benefits available to the Candidate and required approvals from each institution;
- n) a preliminary schedule for progress reports and annual reviews at each institution;
- o) that the thesis will be written in English;
- p) provisions for the submission and examination of the thesis which must meet the requirements of each institution.

Responsibilities of Candidates

Each party undertakes to inform Candidates that, unless explicitly identified as financial support to the Candidate in the Student Agreement, Candidates are responsible for the following expenses:

- a) tuition fees;
- b) amenities and services fees and other incidental fees and charges;
- c) travel expenses;
- d) insurance, including medical and travel insurance, noting that Candidates coming to Australia are required to fulfil Australian Government regulations by purchasing overseas Candidate health cover before applying for an Australian visa;
- e) accommodation and living expenses;
- f) all costs associated with applying for and obtaining appropriate visas and travel documentation;
- g) purchasing textbooks; and
- h) all debts incurred by them during the course of their study.

Intellectual Property

- 8.1 Each party
 - retains ownership of its Intellectual Property existing prior to this Agreement or generated independently of this Agreement (Background Intellectual Property); and
 - grants to the other party (Grantee) a non-exclusive, non-transferable, royalty-free licence to use the Background Intellectual Property that it, in its discretion, contributes to the Program to the extent necessary to perform the Grantee's obligations in accordance with this Agreement.
- 8.2 Ownership of Project Intellectual Property does not affect the Candidate's ownership of copyright in their thesis.

Confidentiality and Privacy

- The parties agree to keep confidential all Confidential Information of another party. The parties will not, without the written consent of a party to whom Confidential Information belongs:
 - a) use the Confidential Information other than for the purposes of performing its obligations under this Agreement; or
 - b) directly or indirectly disclose the information to any third party, beyond those reasonably involved in the performance of this Agreement.
- 9.2 A party will not be in breach of clause 9.1 where Confidential Information is required by law or regulation to be disclosed, provided that the party required to make disclosure promptly notifies the party who has made the Confidential Information available, to allow the latter party to assert whatever exclusions or exemptions may be available to it under such law or regulation.

- 9.3 On termination or expiry of this Agreement each party must return all Confidential Information in its possession or control to the owner of such Confidential Information and permanently delete all such Confidential Information stored electronically.
- 9.4 Each party will assume responsibility for the actions of its Key Personnel, employees, agents and sub-contractors who have access to the Confidential Information from time to time and must ensure that they are aware of and strictly bound by the confidentiality obligations created under this Agreement.
- Privacy
- 9.5 Each party will manage Personal Information in accordance with applicable privacy legislation and will obtain from the Candidate their consent to sharing of the Candidate's personal information to facilitate management of the Candidate's Candidature under this Agreement.

Insurance

- 10.1 Each party will effect and maintain the following insurances for the duration of this Agreement:
 - public liability and professional indemnity insurance cover appropriate and sufficient to cover the activities of that party anticipated under the terms of this Agreement; and
 - workers' compensation insurance as required under applicable workers' compensation legislation for its employees; and
 - will provide, when requested by another party, evidence of the insurances effected under this clause 10.
- 10.2 The effecting of insurance as required under this clause will not in any way limit the obligations or responsibilities of the parties under this Agreement.

Notices

- 11.1 A notice, demand or consent (Notice) given to a party under this Agreement is only effective if it is in writing and sent in one of the following ways:
 - a) delivered or sent by prepaid post or electronic message to that party at its address and marked to the attention of the Representative set out in Item 2 of the Schedule;
- 11.2 Subject to next, a Notice given for any purpose under this Agreement is taken to be received:
 - a) if hand delivered, on delivery;
 - b) if sent by prepaid post, five (5) (or in the case of a Notice sent to another country, fourteen) business days after the date of posting;
 - c) except for a notice under clause 13, if sent by electronic message, when the sender receives an automated message confirming delivery, or eight hours after the message has been sent, unless the sender has received an automated message that the electronic message was not delivered or the sender knows or should reasonably know that there is a network failure which may have resulted in non-delivery.
- 11.3 If any Notice is given on a day that is not a business day or after 5.00pm on a business day, in the place of business of the receiving party, it is to be treated as having been given at the beginning of the next business day.
- 11.4 If a party gives the other party three (3) business days' notice of a change of its address or fax number, a Notice is only effective if it is given to that party at the latest address or fax number.

Dispute Resolution

- 12.1 If a dispute arises in relation to any matter under, or the meaning, intent or application of any part of this Agreement, the parties agree to undertake the procedure in this clause 12 before resorting to arbitration, litigation or some other form of dispute resolution procedures.
- 12.2 A party alleging a dispute must give the other party notice in writing setting out all details of the dispute.
- 12.3 On receipt of a notice under clause 12.2 the nominated senior representatives of both parties must meet within five (5) business days and, acting reasonably and in good faith, do their best to resolve the dispute through negotiation.

Mediation

- 12.4 If the parties do not resolve the dispute within 45 days' receipt of a notice under clause 12.2, then a party may notify the other party in writing that the matter must be referred to a mediator to be nominated in accordance with the ICC Mediation Rules. The number of mediators shall be one, the place of the mediation shall be Singapore and the language of the mediation shall be English.
- 12.5 Any person is entitled to appear before the mediator or on any matter respecting the mediation by teleconference, videoconference, or any similar electronic means.
- 12.6 The costs of the mediator will be borne equally by the parties.

Urgent Relief and Termination

- 12.7 Despite the existence of a dispute, each party must continue to perform its obligations under this Agreement.
- 12.8 This clause 12 does not restrict or limit the right of either party
 - to obtain interlocutory relief; or
 - to immediately terminate this Agreement, where this Agreement provides such a right.

Withdrawal with respect to specific Candidate

- 13.1 An institution may withdraw from co-supervision of a Candidate if:
 - that Candidate is excluded/expelled from that institution for unsatisfactory academic progress; or
 - the principal/lead Supervisor appointed by that institution is not available to continue to supervise the Candidate and a comparably qualified replacement reasonably acceptable to the other institution and the Candidate is not available.
- 13.2 In the case of an institution withdrawing from co-supervision of a Candidate for any reason, written notification should be sent to the other institution within one month explaining the decision and the institutions must promptly communicate to consider the impact of the withdrawal on the Candidate's academic progress at the continuing university.
- 13.3 If the Candidate requires access to existing intellectual property of the withdrawing institution in order to complete their thesis, the institutions will enter into good faith negotiations to make that existing intellectual property available on reasonable terms and subject to reasonable obligations of confidentiality.

Termination of Agreement

- 13.4 Either party may terminate this Agreement by providing a minimum of six (6) months written notice to the other party, or such shorter period as the parties may agree upon in writing.
- 13.5 Either party may terminate this Agreement immediately if the other party:
 - commits a material breach of this Agreement which is unable to be rectified;
 - fails to rectify a breach of this Agreement within 30 days of receiving a written notice specifying the breach to be rectified.
- 13.6 Candidates who have commenced the Program at the date of termination of this Agreement will be permitted to complete the Program, and the obligations of a party in respect of such Candidates as specified in this Agreement will continue until the Candidate has completed the Program in compliance with the Policies of each party.
- 13.7 Any terms of this Agreement which, by their nature, are continuing will survive the termination or expiry of this Agreement. Without limitation, clauses 1, 8, 9, 13.3, 13.6 and 14 survive the expiry or termination of this Agreement.

Use of Name and Logo

- A party will not use, nor permit any person or entity to use, the name or logo or any variation of the name and logo of the other party without prior written approval of an authorised representative of that party.

ESOS Act Compliance

- 15.1 IITH acknowledges that Deakin has obligations under the Education Services for Overseas Students Act 2000 (Cth) (ESOS Act 2000) and the National Code of Practice for Registration Authorities and Providers of Education and Training to Overseas Students (National Code).
- 15.2 To enable Deakin to meet its obligations under the ESOS Act and the National Code, neither party will:
 - a) participate in false or misleading advertising or promotional practices about the other party;
 - b) use, or permit any person or entity to use the name or logo (or any variation thereof) of the other party without first obtaining prior written consent;
 - c) offer to students any guarantee of admission or make any representations about Deakin;
 - d) make any false or misleading comparisons with other education providers and their courses;
 - e) make any inaccurate claims of association with other education providers; or
 - f) give inaccurate information to a prospective student about fees and charges payable.
- 15.3 All promotional materials prepared by IITH and referencing the Program must include Deakin's Commonwealth Register of Institutions and Courses for Overseas Students (CRICOS) number as follows:
- Deakin University CRICOS Provider Code 00113B.

Warranty

IITH warrants to Deakin that

- a) it is not a department, agency or authority of a country, the national government of a country, a province, state, self-governing territory, region, local council, municipality or other political subdivision (by whatever name known) of a foreign country; and
- b) no government is in a position to exercise substantial control over it and, in particular:
 - (i) there is no requirement for a majority of the members of its governing body to be members or part of (however described) a political party;
 - (ii) the education it provides and research it conducts is not required, by a law or its governing documents, to adhere to, or be in service of, political principles or political doctrines of a government or political party that forms a government; and
 - (iii) its academic staff are not required, by a law or its governing documents, to adhere to, or be in service of, political principles or political doctrines referred to in paragraph (ii) in their teaching, research, discussions, publications or public commentary.

Miscellaneous

- **Entire Agreement**
- 17.1 This Agreement constitutes the entire agreement between the parties as to its subject matter. It supersedes all prior understandings or agreements between the parties and any prior condition, warranty, indemnity or representation imposed, given or made by a party in connection with that subject matter.
- Variation
- 17.2 This Agreement may only be altered or varied in writing signed by each of the parties.
- **Waiver**
- 17.3 A waiver of any right under this Agreement must be in writing signed by the party granting it. A waiver is only effective in relation to the particular obligation or breach for which it is given. It is not to be taken as an implied waiver of any other obligation or breach or an implied waiver of that obligation on any other occasion.
- 17.4 The fact that a party fails to do, or delays in doing, something the party is entitled to do under this Agreement does not amount to a waiver.
- 17.5 A party may not assign or transfer any of its rights or obligations under this Agreement without the prior written consent of the other party.
- **Severability**
- 17.6 Part or all of any clause of this Agreement that is illegal or unenforceable in any jurisdiction will be severed in the relevant jurisdiction and the remaining provisions of this Agreement will continue in force. The legality or enforceability of the provision in any other jurisdiction will not be affected.

- **Meetings**
- 17.7 If the parties are required to meet or convene a committee, the meeting or committee may take place in person, or by electronic means such as teleconference or videoconference and decisions may be made and documented by circulation.
- **Costs**
- 17.8 Except as otherwise set out in this Agreement, each party must pay its own costs and expenses in relation to preparing, negotiating, executing and completing this Agreement and any document related to this Agreement.
- **Execution of this Agreement**
- 17.9 This Agreement is properly executed when:
 - each party has executed this document; or
 - if the parties execute separate but identical documents, when those separately executed documents are exchanged between the parties, including by mail, facsimile transmission or electronically.
- 17.10 If this Agreement is executed in counterparts, the date of this Agreement is the date on which it is signed by the last party.

2. Enrolment and Residency

- 2.1 The maximum expected duration of this joint supervision program is 4 years. If it should continue beyond these four (4) years, an amendment must be signed.
- 2.2 They must remain enrolled in both institutions throughout the program. The home institution, the host institution and the date of enrolment in the Program are:
 - Home Institution-
 - Host Institution-
 - Date of enrolment for first year of jointly supervised thesis -
- 2.3 The Candidate is relieved from paying tuition fees at the institution(s) identified below. An institution may charge student fees (e.g. student union fees, amenities fees) during the period of residency regardless of having given relief from payment of tuition fees.
- Name of institution granting relief from payment of fees-
- 2.4 A Candidate normally spends between three (3) to 12 months of the total period of study at each institution subject to the approval by the Supervision Team. The institutions may agree to a greater or lesser division of time between them if they agree that it is in the Candidate's best interests or if the period of residency is adversely affected by a Force Majeure Event. The planned duration of doctoral research at each institution is:
 - Home Institution-
 - Host Institution-

3. Health Insurance and Visas

- 3.1 Candidates must have insurance coverage to carry out doctoral studies at both universities.
- 3.2 Candidates in residence at Deakin must hold overseas student health cover if they are not Australian citizens or permanent residents of Australia. It is a requirement of Australian Government regulations that overseas student health cover be purchased before applying for an Australian visa. On arrival in Australia, the Candidate must provide proof of cover to Deakin.
- 3.3 Each institution will provide the necessary documentation (where applicable) to enable the Candidate to make application for a student visa.

4. Supervision and Support to the Candidate

- 4.1 In each of the institutions the Candidate will carry out their research under the supervision and responsibility of the following supervisors:
- Lead Supervisors-Home Institution-
 - Host Institution-

- 4.2 A party may also nominate an associate Supervisor by notice in writing to the Candidate and the other institution.
- 4.3 The supervisors agree to jointly supervise the Candidate diligently, competently and in accordance with the regulations in force at their respective institutions and the academic traditions of their respective countries.
- 4.4 Each institution will provide to the Candidate the following facilities and specialised equipment to enable them to undertake the research project:
 - Home Institution-
 - Host Institution-
- 4.5 Each institution will provide to the Candidate the following financial support (e.g. scholarship, fee waiver, stipend or travel grant):
 - IITH - [Amend as necessary]
 - 1) IITH will fund the Candidate with a stipend equal to the norms of Indian Ministry of Education stipend for the duration of candidature excluding their residency at IITH.
 - Deakin –
 - 1) Full tuition fee waiver for up to four (4) years once the Candidate joins the doctoral program at Deakin. - [update]
 - 2) a top up stipend of \$A150.00 per month, for up to three (3) years, while resident at IITH and after the Candidate has successfully completed their PhD Research Proposal Seminar at IITH; - \$A1800.00 per annum (\$A150.00 per month)
 - 3) a stipend, equivalent to the Australian Research Training Program (RTP) rate (\$A28,600 per annum tax exempt indexed annually, 2021 rate), paid fortnightly, while resident at Deakin - [update]

5. Academic Progress

- 5.1 The Candidate is subject to the legislation, policies and procedures of both institutions with respect to academic progress and research misconduct.
- 5.2 Each institution must make available to the Candidate the same access to support (including orientation and transition), rights, benefits and infrastructure that it would apply to candidates registered solely at that institution including, without limitation access to its complaint processes and appropriate advocacy support whilst in residence at that institution.
- 5.3 The language of instruction is:
 - Home Institution: - English
 - Host Institution: - English
- 5.4 The Candidate must complete the following requirements and training:
 - Preparation for Provisional Candidature – Induction Training - Deakin University - Induction (1 hr) - To be completed in first 6 months from enrolment
 - Candidature Engagement Form - Deakin University- Form to be discussed with supervisory team- To be completed within in the first month of candidature at Deakin
 - Individual Learning Plan - Deakin University - Documents to be maintained and updated throughout candidature - To be first completed within the first month of candidature at Deakin and reviewed and maintained throughout candidature
 - Research Integrity - General Research Integrity and Human Research Ethics Training modules - Deakin University - Induction (3 hr) - To be completed prior to confirmation of candidature
 - HDR Respectful Behaviour Training module- Deakin University - Induction (1 hr) - To be completed prior to confirmation of candidature
 - Candidature Engagement Form and Individual Learning Plan - Deakin University -Documents to be maintained and updated throughout candidature - To be completed in first 3 months of enrolment
 - Coursework requirements - Deakin University - [to be completed as required] - To be completed prior to confirmation of candidature

- The preliminary schedule for progress reports and annual reviews at each university is:
 - Confirmation of Candidature - Deakin University - Within the first [to be completed] months of commencement of candidature at Deakin
 - Annual Review - Deakin University - 1 year after Confirmation of Candidature
 - Annual Review - Deakin University - 2 years after Confirmation of Candidature
 - Review of Ph.D. Research Progress in presence of Doctoral Committee Yearly once for first two (2) years and every six (6) months subsequently - IITH
 - Two (2) years from the date of Joining IITH - JRF to SRF Upgradation - IITH
- 5.6 Each University must ensure that an up to date work safety plan, where applicable, is completed and applied to the work undertaken in its laboratories by the Candidate.

6. Meetings

- If the parties are required to meet or convene a committee (including, without limitation, for the purposes of the thesis defence) any party or committee member may attend the meeting or committee in person, or by electronic means such as teleconference or videoconference and decisions may be made and documented by circulation.

7. Doctoral Examination

- The procedure for submission, identification and reproduction of a thesis, as well as authorisation to defend it, must comply with the Policies of both institutions.
- As part of the doctoral examination process, a Doctoral Examination Committee (DEC) will be established at IITH. The Committee will include the following representatives:
 - a) IITH lead Supervisor;
 - b) Deakin principal Supervisor;
 - c) Deakin Faculty or School HDR Coordinator or Nominee; and
 - d) IITH DC Chair
- **Thesis Examination**
- 4.28 The Candidate will be required to submit a single thesis to both institutions at the same time. The thesis must be written in English. If required, an abstract must be provided in the language designated by IITH.
- 7.3 Each institution will confirm in writing to the other party that the Candidate has fulfilled all of their requirements to proceed to examination of the thesis. Only if the requirements of both institutions are met can the doctoral examination, including the nomination of examiners, be planned and organised.
- 7.4 A total of four (4) independent and appropriately qualified examiners will be jointly nominated. All nominated examiners will be external to both Deakin and IITH.
 - At IITH, the DEC will appoint at least two (2) of the jointly nominated examiners to examine the thesis.
 - At Deakin, the Thesis Examination Committee will appoint the two (2) IITH nominated examiners plus an additional one (1) examiner to a total of three (3).
- 7.5 The examination of the thesis must comply with the Policies of each institution. Examiners' reports must be provided in English.
- **Oral Defence of Thesis**
- 7.6 The thesis will generate only one oral defence in English and only one (1) defence report in English.
- 7.7 The date of the defence, if required, will be agreed upon by the Lead Supervisor(s) who will then notify the relevant heads of their respective institutions.
- 7.8 If the thesis is successfully defended, the institution at which the defence takes place will transmit a copy of the complete defence file to the other institution.
- 7.9 The doctoral examination must comply with the Policies of both institutions. After the requirements of both institutions have been satisfied, the outcome of the doctoral examination can be awarded.

8. Award

- 8.1 If the thesis is successfully defended the institution at which the defense takes place will transmit a copy of the complete defense file to the other institution. Upon the Candidate satisfying all requirements and obtaining all internal approvals for the conferral of the degree at each institution, two separate testamurs or certificates will be conferred on the Candidate, noting that the doctoral award is conferred under a jointly supervised HDR program between the institutions.
- 8.2 A decision by one institution not to confer an award does not preclude the other institution from conferring the award, however that award must not refer to this Agreement or imply that the other institution has approved the conferral of the award. The home institution will be responsible for issuing the jointly badged testamur.
- **Testamur:** 8.3 Subject to clause 8.2, the diploma or certificate conferred on a Candidate who has successfully completed the Program (Testamur) must note that the doctorate is awarded as a single degree under a jointly supervised doctoral program between the parties.

9. Intellectual Property Provisions

- 9.1 The parties acknowledge that nothing in this Agreement affects the Candidate's ownership of copyright in the thesis.
- 9.2 Provisions for the ownership, licencing and restrictions on publication of Intellectual Property created, developed and discovered by the Candidate during the Program (Project Intellectual Property) are as set out below:
- 9.3 The parties will execute any further documentation required to give effect to the provisions of this clause.

10. Termination of Program

- 10.1 An institution may withdraw from co-supervision of the Candidate if:
 - a) the Candidate is excluded/expelled from that institution for unsatisfactory academic progress; or
 - b) the Principal Supervisor appointed by that institution is not available to continue to supervise the Candidate and a comparably qualified replacement is not available.
- 10.2 In the case of an institution withdrawing from co-supervision of the Candidate for any reason, written notification should be sent to the other institution within one month explaining the decision and the institutions must promptly communicate to consider the impact of the withdrawal on the Candidate's academic progress at the continuing university.
- 10.3 If the Candidate requires access to existing intellectual property of the withdrawing institution in order to complete their thesis, the withdrawing institution grants to the other institution and to the relevant Candidate a non-exclusive, non-transferable, royalty-free licence to use its Intellectual Property for the sole purpose of completing the thesis.

6.5 Fellowship for International Research Scholars in Technology (FIRST Fellowship)

The presence of international students at IITH campus is still in its formative stages. To further streamline this progress, the FIRST fellowship with following details is proposed:

- **Duration:** 4 years Fellowship amount of 60,000/- per month (Rs. 29,000 for the first two years and Rs. 25,000 for the next two years from the IRG per candidate) Contingency: Up to 100,000/- per year for research expenses
- **Minimum Eligibility:** Foreign nationals with excellent academic qualifications having a master's degree in engineering or technology and a minimum CGPA of 8.5 (on a 10-point scale)
- **Desirable:** Previous degree from a topline university in their respective countries. Research output in terms of publications/patents will be given a weightage during shortlisting. Selection process: Shortlisting followed by online interview. Possible No.: 10 (max.). The seats will be not be filled-up if enough applicants of desired quality are not found.
- **Deadline:** The last date of sending the application by email to first.iar@iith.ac.in is on or before April 30, 2021/17:00 IST
- Proposed to Start with the engineering departments but will be rolled out for the other departments in the next cycle.
- The number of fellowships will be supernumerary.

6.6 M.Tech. Program for Foreign Nationals

IIT Hyderabad offers a 2 years MTech/MDes Program for foreign nationals in some selected departments. The following are some of the salient features of this program:

- The Foreign Nationals Candidates who are NOT citizens of India (by birth or naturalized), do not belong to PIO/OCI category, and whose parents are not citizens of India and do not come under PIO/OCI category at the time of applying - can seek admission under the following categories
 - (A) Self-financing Students
 - (B) Visiting students: A Foreign National student who has registered at a recognized Institute/ University in India or abroad and officially recommended by the Institute/University where he/she is studying and wishes to carry out research or to avail academic facilities or credit a set of courses, for a maximum period of 6 months.
- Seats allotted to foreign nationals are supernumerary with a cap of 10% of total number of seats in every course.
- For admission eligibility, the candidate may exercise one of the following options:
 - (A) Qualifying Degree from India (except from IITs) / Abroad (as per the MTech Admission Brochure of IIT Hyderabad). For details and submission of online application visit: <http://www.iith.ac.in/index.php/admission/mtech-admission>
or
 - (B) Qualifying Degree from IITs with CGPA is 8.0 and Above (as per the MTech Admission Brochure of IIT Hyderabad). For details and submission of online application portal of IITH.
or
 - (C) Qualifying Degree from Universities abroad.
 - The candidate should not be more than 25 years of age on 1st July of the corresponding year of application.
 - Each year the senate of IITH will decide the number of number of foreign nationals to be admitted per year in various specializations in each M. Tech./M.Des. program.
 - Merely fulfilling the minimum eligibility criteria does not guarantee the selection of a candidate into any program.

Possessing GATE/GRE qualification are optional. However, the medium of language for the last qualifying degree should be in English.

More information about the program can be obtained from the following link: https://www.iith.ac.in/wp-content/uploads/forms/FNA_guidelines%20.docx



INDIAN INSTITUTE OF TECHNOLOGY HYDERABAD

Kandi, Sangareddy, 502285, Telangana, INDIA

Photo

BACHELOR OF TECHNOLOGY in Computer Science & Engineering (HONORS)

CONSOLIDATED GRADE REPORT

Name :
Roll No.NAD ID :
Year of Study 2015-2019

Course No.	Course Name	Grade	Credits	Course No.	Course Name	Grade	Credits
CS1000	A Gentle Introduction to CS	A+	1.00	PH2117	Photonics	A+	1.00
CS1310	Discrete Structures-I	A	2.00	CS2410	Theory of Computation	A	2.00
CY1017	Environmental Chemistry -I	A+	1.00	CS2420	Introduction to Complexity Theory	A	1.00
CY1031	Chemistry Laboratory	A+	2.00	CS2433	Principle of Programming Languages-II	A	3.00
EE1110	Boolean Algebra	A+	1.00	CS2443	Algorithms	A	3.00
ID1035	Independent Project	A+	1.00	CS3320	Compilers-I	A	1.00
ID1054	Digital Fabrication	A+	2.00	CS3523	Operating Systems-II	A+	3.00
ID1300	Introduction to Programming	A	1.00	MA2130	Complex Variables	A+	1.00
ID1301	Introduction to Programming Lab	A	1.00	MA2140	Statistics	A+	1.00
LA1010	Introduction to International Finance	A+	1.00	BI1060	Introduction to the Brain and Neuroscience	A+	1.00
LA1170	Japanese Conversation 1	A	1.00	CS3035	Mini Project	A	3.00
MA1110	Elements of Basic Calculus-I	A	1.00	CS3423	Compilers-II	A+	3.00
MA1220	Elements of Basic Calculus-II	A	2.00	CS3530	Computer Networks I	A	3.00
PH1017	Classical Physics	A+	1.00	CS3550	DBMS	A	3.00
BO1010	Introduction to Life Sciences	A+	1.00	CS6383	Introduction to Compiler Engineering	A	2.00
CS1330	Programming in C/C++	A	1.00	CS6403	Constraint Solving	A	2.00
CS1331	Programming in C/C++ Lab	A+	2.00	CS6510	Applied Machine Learning	A	3.00
CS1340	Discrete Structure - II	A	2.00	LA5010	Macroeconomics	A+	3.00
CS1350	Introduction to Data Structures	A	2.00	CS3055	Mini Project	A	3.00
CS1351	Introduction to Data Structures Lab	A	2.00	CS3543	Computer Networks II	A	3.00
CY1027	Dynamics of Chemical Systems	A	1.00	CS3563	Introduction to DBMS II	A+	3.00
LA1210	Spoken Japanese Basics	A	1.00	CS5260	Compiler Optimizations	A	3.00
MA1130	Vector Calculus	A+	1.00	CS5480	Deep Learning	A+	3.00
MA1140	Elementary Linear Algebra	A	1.00	CS5523	Programming GPUs & Accelerators: A Principled, Quantitative Approach	A	1.00
PH1027	Electro Magnetism & Maxwell Equations	A	1.00	CS6200	Advanced Topics in Formal Methods	A	3.00
CS2233	Data Structures	A	3.00	S5120	Probability in Computing	A	3.00
CS2323	Computer Architecture	A	2.00	CS5570	Algebra for Computer Science	A	3.00
CS2400	Principles of Programming Languages - I	A	1.00	CS6250	Advanced Compiler Optimizations	A	3.00
CS3510	Operating Systems I	A	1.00	CS6440	Special Topics in Machine Learning	A	3.00
EE1120	Digital System Design	A	1.00	LA1440	Risk Perceptions, Decision and Prevention	A	1.00
LA1030	Introductory Economics	A	1.00	LA1450	Personality Psychology	A	1.00
LA1260	Fundamentals of Organizational Structure	A+	1.00	CS4443	Software Engineering	A-	3.00
MA2110	Probability	A+	1.00	S6300	Topics in Compiler Optimizations	A	3.00
MA2120	Transform Techniques	A	1.00	CS6470	Topics in Vision and Learning	A	3.00
PH1031	Physics Laboratory	A-	2.00	CS6490	Hardware Architecture for Deep Learning	A	3.00

Course No.	Course Name	Grade	Credits	Course No.	Course Name	Grade	Credits
ID4006	Ethics and Values	A-	1.00	MA6040	Fuzzy Logic Connectives: Theory And Applications	A	3.00
LA1430	Understanding Resilience	A	1.00		Advanced Memory Systems Architecture	A	1.00

Total Credits Earned :

Honors Program			
Course No.	Course Name	Grade	Credits
CS6230	Optimization Methods in Machine Learning	A+	3.00
CS6410	Software Verification	A-	3.00
CS4025	Honors Project (Stage I)	A	3.00
CS4045	Honors Project (Stage-II)	A	3.00

Cumulative Grade Point Average (Out of 10.00)		
B.Tech	Honors	B.Tech & Honors
.....

Additional Courses			
Course No.	Course Name	Grade	Credits
DS1024	Action Drawing	A-	1.00
MA1150	Differential Equations	A-	1.00
CS2205	Research Internship I	A	1.00
NS1002	National Service Scheme	S	0.00
CS2305	Research Internship	A	1.00
CS5470	Theory of Learning and Kernel Methods	AU	3.00
CS5110	Computational Complexity	A-	3.00
CI101	Clean India	S	1.00
CS5560	Probabilistic Models for Machine Learning	B	3.00
CS6370	Information Retrieval	A-	3.00

Grading System:

Grade	A+	A	A-	B	B-	C	C-	D	AU	S	U	FS	FR
Points	10	10	9	8	7	6	5	4	0	0	0	0	0

Note: A+ (Outstanding Performance in the Course, typically in the top 2% of the Class), AU(Audit), S(Satisfactory), U(Unsatisfactory) FS(Fail(Supplementary)) and FR [Fail (Repeat)]

The Institute awards no rank or class.

BM: Biomedical, BO: Biotechnology, CA: Creative Arts, CS: Computer Science, CY: Chemistry, EE: Electrical Engineering, FC: Fractional Credit. ID: Instrumentation Design, LA: Liberal Arts, MA: Mathematics, ME: Mechanical Engineering, MS: Materials Science and PH: Physics

Prepared by:

Checked by:

Date of Issue:

Joint Registrar (A.P.)



INDIAN INSTITUTE OF TECHNOLOGY HYDERABAD

Kandi, Sangareddy - 502 285. Telangana, INDIA

Student
Photo

MASTER OF TECHNOLOGY

MECHANICAL ENGINEERING with specialization in MECHANICS AND DESIGN

CONSOLIDATED GRADE REPORT

Name : _____
Roll No. : _____

NAD ID : _____
Year of Study : 2017-2019

Course No.	Course Name	Grade	Credits
ME5130	Finite Element Method	A-	3.00
ME5260	Continuum Mechanics	C	3.00
ME5110	Advanced Mechanics of Solids	A	1.50
ME5120	Dynamics and Vibration	A-	3.00
ME5360	Planar Multibody Dynamics	A+	1.50
ME5010	Mathematical Methods for Engineers	A+	3.00
ME5451	Computational Mathematics Lab	A-	1.00
ME5650	Engineering Noise Control	A	3.00
ME5723	Experimental Solid Mechanics	A+	3.00
ME5911	Design Engineering Core Lab II	A-	2.00
ME7100	Advanced Topics in Mathematical Tools	A	3.00
ME5670	Vehicle Dynamics & Modeling	A-	3.00
ME6106	Seminar	A+	1.00
ME6005	M.Tech. Project (Stage-1)	A	12.00
ME6505	M.Tech. Project (Stage-2)	A	12.00

Total Credits Earned : 60.00

Cumulative Grade Point Average (out of 10) : 6.82

Additional Courses			
Course No.	Course Name	Grade	Credits
CI 101	Clean India	S	1.00
BM5150	Digital Signal Processing	C	2.00

Grading System

Grade	A+	A	A-	B	B-	C	C-	D	AU	S	U	FS	FR
Points	10	10	9	8	7	6	5	4	0	0	0	0	0

Note: **A+** (Outstanding Performance in the Course, typically in the top 2% of the Class), **AU** (Audit), **S** (Satisfactory), **U** (Unsatisfactory), **FS** [Fail (Supplementary)] and **FR** [Fail (Repeat)], **BM**: Biomedical Engineering.

The Institute Awards No Rank or Class

Prepared By:

Checked By:

Date of issue:

Joint Registrar (A.P.)



Roll No.

भारतीय प्रौद्योगिकी संस्थान हैदराबाद

अभिषेद की अनुशंसा पर
कंप्यूटर विज्ञान एवं अभियांत्रिकी
में
प्रौद्योगिकी स्नातक
की उपाधि

NAME

को अपने सभी अधिकारों, विशेषाधिकारों तथा उत्तरदायित्वों के साथ एतद्वारा प्रदान करता है।
दिनांक दस अगस्त दो हजार उन्नीस को संस्थान की मुद्रा अंकित यह उपाधि दी गई।

Indian Institute of Technology Hyderabad

Upon the recommendation of the Senate, hereby confers the degree of

Bachelor of Technology

in

Computer Science & Engineering

on

NAME

with all its rights, privileges, and responsibilities.

Granted under the seal of the Institute on

the Tenth day of

August, Two Thousand and Nineteen.

कुलसचिव
Registrar

निदेशक
Director

अध्यक्ष, अभिशासक परिषद
Chairman, Board of Governors

ROLL NO.



भारतीय प्रौद्योगिकी संस्थान हैदराबाद

अभिषेद की अनुशंसा पर
कंप्यूटर विज्ञान एवं अभियांत्रिकी (ऑनर्स)
 में
प्रौद्योगिकी स्नातक
 की उपाधि

NAME

को अपने सभी अधिकारों, विशेषाधिकारों तथा उत्तरदायित्वों के साथ एतदद्वारा प्रदान करता है।
 दिनांक दस अगस्त दो हजार उन्नीस को संस्थान की मुद्रा अंकित यह उपाधि दी गई।

Indian Institute of Technology Hyderabad

Upon the recommendation of the Senate, hereby confers the degree of
Bachelor of Technology
 in
Computer Science & Engineering (HONORS)

on

NAME

with all its rights, privileges, and responsibilities.

Granted under the seal of the Institute on
 the Tenth day of
 August, Two Thousand and Nineteen.

कुलसचिव
Registrar

निदेशक
Director

अध्यक्ष, अभिशासक परिषद
Chairman, Board of Governors



ROLL NO.

भारतीय प्रौद्योगिकी संस्थान हैदराबाद

अभिषेद की अनुशंसा पर
कंप्यूटर विज्ञान एवं अभियांत्रिकी (ऑनर्स)
गौण विषय: अर्थ शास्त्र

में

प्रौद्योगिकी स्नातक
की उपाधि

NAME

को अपने सभी अधिकारों, विशेषाधिकारों तथा उत्तरदायित्वों के साथ एतद्वारा प्रदान करता है।
दिनांक दस अगस्त दो हजार उन्नीस को संस्थान की मुद्रा अंकित यह उपाधि दी गई।

Indian Institute of Technology Hyderabad

Upon the recommendation of the Senate, hereby confers the degree of

Bachelor of Technology

in

Computer Science & Engineering (HONORS)
with Minor in Economics

on

NAME

with all its rights, privileges, and responsibilities.

Granted under the seal of the Institute on
the Tenth day of
August, Two Thousand and Nineteen.

कुलसचिव
Registrar

निदेशक
Director

अध्यक्ष, अभिशासक परिषद
Chairman, Board of Governors

Roll No



भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

भारतीय प्रौद्योगिकी संस्थान हैदराबाद

अधिष्ठात्र की अनुशंसा पर

विद्युत अभियांत्रिकी में प्रौद्योगिकी स्नातक

एवं

कंप्यूटर विज्ञान एवं अभियांत्रिकी में प्रौद्योगिकी स्नातक - सेकंड मेजर

की उपाधि

NAME

को अपने सभी अधिकारों, विशेषाधिकारों तथा उत्तरदायित्वों के साथ एतदद्वारा प्रदान करता है।
दिनांक दस अगस्त दो हजार उन्नीस को संस्थान की मुद्रा अंकित यह उपाधि दी गई।

Indian Institute of Technology Hyderabad

Upon the recommendation of the Senate, hereby confers the degree of

**Bachelor of Technology
in Electrical Engineering**

and

**Bachelor of Technology
in Computer Science & Engineering as Second Major**

on

NAME

with all its rights, privileges, and responsibilities.

Granted under the seal of the Institute on
the Tenth day of
August, Two Thousand and Nineteen.

कुलसचिव
Registrar

निदेशक
Director

अध्यक्ष, अभिशासक परिषद
Chairman, Board of Governors



ROLL NO.

भारतीय प्रौद्योगिकी संस्थान हैदराबाद

अभिषेक की अनुशंसा पर
विद्युत अभियांत्रिकी एवं अभियांत्रिकी विज्ञान
में
प्रौद्योगिकी स्नातक
की उपाधि

NAME

को अपने सभी अधिकारों, विशेषाधिकारों तथा उत्तरदायित्वों के साथ एतद्वारा प्रदान करता है।
दिनांक दस अगस्त दो हजार उनीस को संस्थान की मुद्रा अंकित यह उपाधि दी गई।

Indian Institute of Technology Hyderabad

Upon the recommendation of the Senate, hereby confers the degree of

Bachelor of Technology

in

Electrical Engineering and Engineering Science

on

NAME

with all its rights, privileges, and responsibilities.

Granted under the seal of the Institute on

the Tenth day of

August, Two Thousand and Nineteen.

कुलसंचिव
Registrar

निदेशक
Director

अध्यक्ष, अभिशासक परिषद
Chairman, Board of Governors



भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

ROLL NO.

भारतीय प्रौद्योगिकी संस्थान हैदराबाद

अधिष्ठ अनुशंसा पर
कंप्यूटर विज्ञान एवं अभियांत्रिकी में प्रौद्योगिकी स्नातक
अभियांत्रिकी विज्ञान में प्रौद्योगिकी स्नातक
की उपाधि

NAME

को अपने सभी अधिकारों, विशेषाधिकारों तथा उत्तरदायित्वों के साथ एतद्वारा प्रदान करता है।
दिनांक पांच अगस्त दो हजार अठारह को संस्थान की मुद्रा अंकित यह उपाधि दी गई।

Indian Institute of Technology Hyderabad

Upon the recommendation of the Senate, hereby confers the degree of

Bachelor of Technology
in Computer Science & Engineering

Bachelor of Technology
in Engineering Science

on

NAME

with all its rights, privileges, and responsibilities.

Granted under the seal of the Institute on
the Fifth day of
August, Two Thousand and Eighteen.

कुलसचिव
Registrar

निदेशक
Director

अध्यक्ष, अभिशासक परिषद
Chairman, Board of Governors



Roll No.

भारतीय प्रौद्योगिकी संस्थान हैदराबाद

अभिषद की अनुशंसा पर
कंप्यूटर विज्ञान एवं अभियांत्रिकी
में
प्रौद्योगिकी निष्णात
की उपाधि

NAME

को अपने सभी अधिकारों, विशेषाधिकारों तथा उत्तरदायित्वों के साथ एतद्वारा प्रदान करता है।
दिनांक दस अगस्त दो हजार उन्नीस को संस्थान की मुद्रा अंकित यह उपाधि दी गई।

Indian Institute of Technology Hyderabad

Upon the recommendation of the Senate, hereby confers the degree of

Master of Technology

in

Computer Science & Engineering

on

NAME

with all its rights, privileges, and responsibilities.

Granted under the seal of the Institute on

the Tenth day of

August, Two Thousand and Nineteen.

कुलसचिव
Registrar

निदेशक
Director

अध्यक्ष, अभियासक परिषद
Chairman, Board of Governors



भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

Roll No

भारतीय प्रौद्योगिकी संस्थान हैदराबाद

अभिषेक की अनुशंसा पर
जैवचिकित्सा अभियांत्रिकी
में
प्रौद्योगिकी निष्णात
(पाठ्यक्रम के अनुसार)
की उपाधि

NAME

को अपने सभी अधिकारों, विशेषाधिकारों तथा उत्तरदायित्वों के साथ एतद्वारा प्रदान करता है।
दिनांक दस अगस्त दो हजार उन्नीस को संस्थान की मुद्रा अंकित यह उपाधि दी गई।

Indian Institute of Technology Hyderabad

Upon the recommendation of the Senate, hereby confers the degree of

Master of Technology
(By Course Work)
in
Biomedical Engineering
on

NAME

with all its rights, privileges, and responsibilities.

Granted under the seal of the Institute on
the Tenth day of
August, Two Thousand and Nineteen.

कुलसचिव
Registrar

निदेशक
Director

अध्यक्ष, अधिशासक परिषद
Chairman, Board of Governors



भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

Roll No

भारतीय प्रौद्योगिकी संस्थान हैदराबाद

अभिषद की अनुशंसा पर
कंप्यूटर विज्ञान एवं अभियांत्रिकी
में
कार्यकारी प्रौद्योगिकी निष्णात में डाटा विज्ञान
की उपाधि

NAME

को अपने सभी अधिकारों, विशेषाधिकारों तथा उत्तरदायित्वों के साथ एतद्वारा प्रदान करता है।
दिनांक दस अगस्त दो हजार उन्नीस को संस्थान की मुद्रा अंकित यह उपाधि दी गई।

Indian Institute of Technology Hyderabad

Upon the recommendation of the Senate, hereby confers the degree of
Executive Master of Technology *in* Data Sciences

in
Computer Science & Engineering
on

NAME

with all its rights, privileges, and responsibilities.

Granted under the seal of the Institute on
the Tenth day of
August, Two Thousand and Nineteen.

कुलसचिव
Registrar

निदेशक
Director

अध्यक्ष, अभिभासक परिषद
Chairman, Board of Governors



ROLL NO.

भारतीय प्रौद्योगिकी संस्थान हैदराबाद

अभिषेद की अनुशंसा पर

विद्या वाचस्पति

जिसके लिए सभी निर्धारित अपेक्षाओं को पूर्ण करने पर तथा शोध-प्रबंध के सफल पक्षपोषण के उपरांत:

इनफार्मेशन डिफ्यूजन एंड सम्माराइज़ेशन इन सोशल नेटवर्क्स

की उपाधि

NAME

को अपने सभी अधिकारों, विशेषाधिकारों तथा उत्तरदायित्वों के साथ एतद्वारा प्रदान करता है।
दिनांक दस अगस्त दो हजार उन्नीस को संस्थान की मुद्रा अंकित यह उपाधि दी गई।

Indian Institute of Technology Hyderabad

Upon the recommendation of the Senate, hereby confers the degree of

Doctor of Philosophy

for fulfilling all prescribed requirements for the degree and
successfully defending the thesis titled:

Information Diffusion and Summarization in Social Networks

on

NAME

with all its rights, privileges, and responsibilities.

Granted under the seal of the Institute on
the Tenth day of August, Two Thousand and Nineteen.

कुलसचिव
Registrar

निदेशक
Director

अध्यक्ष, अभिशासक परिषद
Chairman, Board of Governors

IIT Hyderabad's Regulations on Plagiarism

Ethical research practice and reporting

IIT Hyderabad requires that a thesis/report submitted by a research scholar for the award of an academic degree meets the highest standards of academic integrity. The student must ensure that he or she is not violating the accepted practices and principles followed by the international community while conducting the research and preparing the thesis/report. Following are some policies of IIT Hyderabad that a scholar should be aware of while performing and reporting research. The policies may be amended as and when required.

1. A student must not indulge in any of the following academic/research misconduct
 - a. **Fabrication**
Fabrication means making up data or results in any form (print, audio or video) and reporting them.
 - b. **Falsification**
Falsification means manipulation of research finding, inaccurate reporting of data, procedures or processes, omission of data, changing data, etc.
 - c. **Plagiarism**
Plagiarism means using another person's ideas, words, results, processes, procedures, etc., without proper acknowledgement and/or permission.
2. If the research that you carried out is sponsored by an industry, and where IIT Hyderabad entered into an IP right agreement with the sponsoring agency, prior permission must be obtained from the sponsoring agency for including the research finding as part of the thesis/report.
3. Refer correctly the source of information.
 - a. If you are verbatim reproducing a sentence from any other source, it should be in quotes (" ") followed by reference to the source.
 - b. Verbatim reproduction must be avoided as much as possible.
 - c. If you are paraphrasing the information given in any other source, due credit must be given to the original author.
 - d. The sources may be text books, journal publications, conference publications, patents, reports, white papers or any other source, which is published in any form; print (physical or digital), audio or video.
 - e. If you are reproducing or paraphrasing a text from a personal communication from another researcher, due credit must be given to the other person by specifying as personal communication.
4. The anti-plagiarism tool available within the institute must be used for the preparation of reports and the similarity report obtained using software shall be used as a guideline to reduce the potential similarity with already published reports. The student must do the similarity index check at different stages of thesis/report preparation and ensure that the similarity index is kept as low as possible.

5. Although the anti-plagiarism software fails to identify equations and/or figures copied from other sources, any such attempt by the student to copy equations or figures without referring to the source will be treated as plagiarism.
6. Students are allowed to reproduce their own research publications as thesis chapters, however, in such cases, the sole authors of the manuscript must be the student and the supervisor(s) and the student must be the first or equal contribution author.

In case student is not the first (or equal contribution) author and there are other contributors, then the student must get a declaration signed by the supervisor(s) that the work appeared in his/her thesis is solely performed by the submitting student and the other authors will not take credits for the same text (appeared in his/her thesis), when he or she submits the thesis. This declaration (if any) can be added as an extra page to the “Similarity Index Report” and should be submitted while requesting for open colloquium (OC).

7. If you are referring to context taken from the content of a video that is in the public domain or broadcasted by a media house, due credit must be given to the original.
8. It is the student's responsibility to ensure that the final form of the thesis submitted for the award of degree is free from any form of academic misconduct. The institute has the complete right to take necessary academic disciplinary action as decided by the Senate of the institute if found guilty of compromising academic integrity.
9. Academic misconduct will be established under the following circumstances
 - a. Significant departure from accepted practices of the relevant research community
 - b. Misconduct is visible intentionally or knowingly
10. In the event of plagiarism being alleged on any report being submitted in this context to IITH for the award of an academic degree, a committee will be formed by the Senate to investigate the matter. The committee's observation(s) and recommendation(s) will be placed in the Senate. Senate will take the final call about this.

Cover: The Fractal Academics at IIT Hyderabad is inspired by the fractal patterns that are self-similar across different scales. They are formed when similar patterns recur at progressively smaller & larger scales. The IITH logo seen on the cover is one such fractal curve formed through Hilbert filling of the space with variable densities.