LIST OF IMPORTANT NOTIFICATIONS ISSUED IN 2024

Sl. No.	Notice No.	Subject
1	No. IIT(ISM) DAC/692	Creation of APAAR ABC ID for all students
2	No. IIT(ISM) DAC/694	Notification Delaying reforms for Int M Tech Dual degree
3	No. IIT(ISM) DAC/697	Modification of conversion of Phd from FT to PT
4	No. IIT(ISM) DAC/698	Modification of UG/PG/PhD Leave Rules for students/scholars
5	No. IIT(ISM) DAC/699	Modifications in Rules for Deficiency in Academic Performance
6	No. IIT(ISM) DAC/700	Revision in minimum no of students to run an elective course
7	No. IIT(ISM) DAC/702	Modalities For Attendance Relaxation For Internships In Global / Reputed Organizations For The Under Graduate Students.
8	No. IIT(ISM) DAC/707	Modification in the certain rules of Phd Program manual
9	No. IIT(ISM) DAC/710	Modalities for summer semester under NEP system
10	No. IIT(ISM) DAC/720	Scholarship for Dual degree/ Int. M.Tech. students
11	No. IIT(ISM) DAC/724	Start of student mentorship programme for UG students
12	No. IIT(ISM) DAC/725	Standard operating procedure for round year admission to PhD preparation
13	No. IIT(ISM) DAC/727	Minimum No. Of Courses Required To Be Done For The Completion Of Coursework In Ph.D
14	No. IIT(ISM) DAC/741	Authority assigned to Dean Academic for approving all academic related matters
15	No. IIT(ISM) DAC/742	Regarding processing of applications of International students for admission
16	No. IIT(ISM) DAC/743	Regarding The Examination Board And Ph.D. Thesis Evaluation.
17	No. IIT(ISM) DAC/746	Withdrawal From A Course After The Conduct Of Mid Semester Examination
18	No. IIT(ISM) DAC/818	Necessary Requirements to be fulfilled for PwD students and approved pool of scribes
19	No. IIT(ISM) DAC/819	Modification in eligibility criteria for admission in Ph.D.
20	No. IIT(ISM) DAC/820	Handholding classes for 1st year UG / Preparatory students in the language other than English
21	No. IIT(ISM) DAC/821	Updated Ph.D credit Requirement
22	No. IIT(ISM) DAC/823	Consideration of weightage of Phd supervisor and co-supervisor
23	No. IIT(ISM) DAC/825	Revision in non-credit Units
24	No. IIT(ISM) DAC/826	Thesis Or Project Evaluation In PG Programs
25	No. IIT(ISM) DAC/836	New members of DUGC & DPGC
26	No. IIT(ISM) DAC/838	Introduction of Joint 5 year Integrated Dual Degree with IIM Mumbai
27	No. IIT(ISM) DAC/839	UG Program Templates with first year courses and Dual Degree Cat D
28	No. IIT(ISM) DAC/840	New PG Program Templates Notification
29	No. IIT(ISM) DAC/841	Notification of New Ph.D. Template as per NEP 2020
30	No. IIT(ISM) DAC/852	Weightage of different components of evaluation in regular theory courses

Creation of APAAR ABC ID for all students

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD
(OFFICE OF THE DEAN ACADEMIC)

No.IITISM/DAC/692 07.03.2024

NOTICE

CREATION OF APAAR/ABC ID NECESSARY FOR ALL STUDENTS

Launched by Ministry of Education, Govt. of India, Automated Permanent Academic Account Registry (APAAR) is a unique id assigned to the students of all schools and colleges, upon registering for the same, to get their academic data, degrees, scholarships, credits and other aspects recorded under it. Students APAAR/ABC Id will be linked to their Aadhaar Id but will be a separate Id. It is a lifelong ID that tracks students' academic journey and achievements and make transfer from one school/college to another easier. The students can download their APAAR card after doing registration.

ABC / APAAR Id can be created by logging on to https://nad.digilocker.gov.in/students or through https://www.abc.gov.in/

Steps for Registration for APAAR Id

1. Pre-requisite - For registration for APAAR Id, a student needs his/her Aadhaar number and the mobile phone number that has been registered with Aadhaar for receiving OTP.
2. Students can first create their digilocker account using their Aadhaar details.
3. Digilocker can then be used to open an ABC/APAAR Account.
4. Students can then provide the admission number/roll number assigned to them by the Institute in MIS as identifier and enter it for ABC/APAAR registration and also choose the name of IIT Dhanbad as their Institute.
5. The form needs to be submitted online on the same portal, the APAAR/ABC Card will then be generated. The same can be downloaded by the student.

For the long term benefit of the students, registering for ABC/APAAR Id is necessary for Institute students. The students of the batch graduating in 2024 are necessarily required to complete their registration for ABC / APAAR Id by the end of March 2024.

The provision to enter this id in MIS will be provided to the students soon.

9/3/24
Dean (Academic) (I/C)

Copy to –
1. Director / Dy.Director
2. Dean (Infra)/Assoc.Dean (IT & N)
3. DR (Acad) / AR (UG) / AR (PG)
4. All Students

Notification Delaying reforms for Int M Tech Dual degree

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES)
DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/694 06 March 2024

NOTIFICATION

DELAYING THE IMPLEMENTATION OF ACADEMIC REFORM OF REMOVAL OF THEORY COURSES FROM THE FINAL YEAR OF INT. M. TECH. / DUAL DEGREE STUDENTS

The Senate in its 31st meeting held on 20th February 2024 has approved delaying the implementation of Academic Reform of removal of theory courses from the final year of Int. M. Tech. / Dual Degree students.

The senate in its 28th meeting held on 24th July 2023 approved the academic reforms wherein a modification of existing PG Course structure including 5th year Int. M. Tech. and Dual Degree was to be made applicable from the fresh (PG) batch admitted in MS 2023-24. The elective courses were to be dropped from the final semester and the thesis credits were to be adjusted accordingly for such students.

The approved changes will be implemented in the PG batch admitted from MS 2023-24 as decided. However, as many Int. M. Tech. / Dual Degree students of the batch admitted in 2020 are yet to complete their mandatory MS and HSS courses and some are even required to complete their Minor in the final semester, the approved changes is delayed and it will not be implemented for the students of Int. M. Tech. / Dual Degree of 2020 admitted batch. The changes may be made applicable to Int. M. Tech. / Dual Degree students from the 2021 admitted batch.

06/03/2024

Dean (Academic)

Copy to:

1. Director, Deputy Director
2. Registrar
3. Associate Dean (IT & NI)
4. All Faculties
5. All Students

Modification of conversion of Phd from FT to PT

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/697 06 March 2024

NOTIFICATION

MODIFICATION OF RULES FOR CONVERSION OF PH. D. FROM FULL TIME TO PART TIME

The Senate in its 31st meeting held on 20th February 2024 has approved the following modification in rules for conversion of Ph. D. from full time to part time –

In case of conversion of existing full time Ph. D. program of scholars to a part time Ph. D., an undertaking may be obtained from all such scholars instead of the required NoC from the employer.

8/3/24

Dean (Academic) (CO)

Copy to:

1. Director, Deputy Director
2. Registrar
3. All Faculties
4. All Scholars

Modification of UG/PG/PhD Leave Rules for students/scholars

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES)
DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/698 06 March 2024

NOTIFICATION

MODIFICATION OF UG / PG / PH.D. LEAVE RULES FOR STUDENTS / SCHOLARS

The Senate in its 31st meeting held on 20th February 2024 has approved the following modification in the UG / PG / Ph. D. leave rules for the students / scholars –

(i) In Ph. D. / PG, the academic leaves required to be taken for field visits may be allowed to be taken upto the limit provided for the leaves under section 9.1 of the manual. However, the procedure required to be followed for approval for such leaves may remain the same i.e. as provided in section 9.2 of the Ph.D./PG manual.

(ii) For Ph. D. scholars, leaves such as Vacation Leave and Medical Leave (Sr. no. A & B in the Table given in Chapter 8 of the Ph.D. Manual) may be recommended by Supervisor and approved by Convenor DPGC.

(iii) For PG students, leaves such as Vacation Leave, Short Leave and Medical Leave (Sr. no. A, B & C in the Table given in Chapter 8 of the PG Manual) may be recommended by Supervisor and approved by Convenor DPGC. For PG students whose supervisor is not appointed, the leave may be recommended by Convenor DPGC and approved by the HoD.

(iv) For UG students, leaves such as Short Leave and Medical Leave (Sr. no. A and B in the Table given in Chapter 9 of the UG Manual) may be recommended by Convenor DUGC and approved by the HoD.

In addition to the above, the peculiar cases that are not covered under the leave rules would also be dealt with separately.

8/3/24

Dean (Academic) (I/c D)

Copy to:

1. Director, Deputy Director
2. Registrar
3. Associate Dean (IT & NI)
4. All Faculties
5. All Students

Modifications in Rules for Deficiency in Academic Performance

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES)
DHANBAD
OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/699 11 March 2024

NOTIFICATION

MODIFICATION OF RULES FOR DEFICIENCY IN ACADEMIC PERFORMANCE OF STUDENTS / SCHOLARS

The Senate in its 31st meeting held on 20th February 2024 has approved the following modification of rules for deficiency in Academic performance of students / scholars –

(i) In UG / PG, a student with deficient academic performance may be allowed to continue his program up to the maximum prescribed duration to complete the respective program. Such students may be allowed to take lesser course credits in the subsequent semester, if they so wish. The restrictions regarding not taking any position in gymkhana etc. will continue to apply. The academic program of all such students will automatically be discontinued upon completion of the maximum duration, if they fail to fulfil the minimum CGPA criteria or minimum earned credits or still have pending/ backlog courses.

(ii) For Ph. D scholars, obtaining/ accumulation of a 4X grade in registered thesis credits may lead to a semester drop in the subsequent semester. Such scholars may submit an appeal in the Office of Dean (Academic) within ten days of announcement of semester result. The appeal should be complete in all respects citing the reasons for poor grades, and duly recommended by their supervisor. Only upon explicit approval of the Chairman, Senate, such scholars may be allowed to re-register in the program.

In addition to the above, the Automation centre shall provide:

(a) Provision to generate list of academically deficient students/ scholars upon publication of the semester results fulfilling the criteria of academic deficiency.
(b) A provision to remove the names from the generated list may also be provided in order to remove the names of students/ scholars who have left, have withdrawn, are on semester leave, other peculiar cases, etc.
(c) A provision to send an Auto mailer to all the selected academically deficient students/ scholars, their guardians, HoD, etc. on single click may also be provided.

The suitable changes made to the respective academic manuals is enclosed.

Enclosure: as above

11/03/2024
Dean (Academic)

Copy to:

1. Director, Deputy Director
2. Registrar
3. Associate Dean (IT & NI)
4. All Faculties
5. All Scholars/students

Revision in minimum no of students to run an elective course

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/ 700 11 March 2024

NOTIFICATION

REVISION IN MINIMUM NUMBER OF STUDENTS REQUIRED TO REGISTER IN AN ELECTIVE COURSE

The Senate in its 31st meeting held on 20th February 2024 has approved the revision in minimum no. of registered students required to run an elective course in UG /PG /Ph. D. programs to 10 (ten).

Further, in case of courses where number of registered students are only 10, no student will be allowed to drop such course(s) after the commencement of classes, unless there are any pressing circumstances that demand allowing the student to do that.

The following exceptions are allowed to this rule:

(i) Exception in minimum requirement may be made for the course Research Methodology.

(ii) Exception in minimum requirement may be made for the courses to be offered in Summer Semester in case the concerned faculty member is ready to offer the course.

The suitable changes made to the respective academic manuals is enclosed.

Enclosure: as above

11/03/2024
Dean (Academic)

Copy to:

1. Director, Deputy Director
2. Registrar
3. Associate Dean (IT & NI)
4. All Faculties
5. All Scholars/students

Modalities For Attendance Relaxation For Internships In Global / Reputed Organizations For The Under Graduate Students

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES)
DHANBAD
OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/ 702 27 March 2024

NOTIFICATION

MODALITIES FOR ATTENDANCE RELAXATION FOR INTERNSHIPS IN GLOBAL / REPUTED ORGANIZATIONS FOR THE UNDER GRADUATE STUDENTS

The Senate in its 32nd meeting held on 20th March 2024 has approved that the under graduate students who wish to undergo or have secured internships (either through on-campus or off-campus modes) in reputed and renowned companies in physical mode may be allowed for additional 10% attendance relaxation over the mandatory 75% attendance criterion, subject to fulfilment of the following conditions -

1. The students securing off-campus internships in global/ reputed organizations (in physical mode) will have to **report** to both the CDC and the Office of Dean, Academic about the **accepted internship offer** as and when they accept the offer or before leaving for the internship, whichever is earlier, by **submitting a copy of offer acceptance** document. Failure to fulfil this condition would lead to non-acceptance of their request for the additional 10% attendance relaxation.

2. The students securing internships (on-campus or off-campus) in global / reputed organizations and attending it in **physical mode** will be allowed additional 10% attendance relaxation if the number of **missed classes** (due to internship) is **beyond 25% of the total number of classes in a course**, then s/he shall be **eligible for the additional 10% attendance relaxation.**

3. In case the **internship is extended** beyond the initially intimated date of completion, the student will have to **immediately inform** the Office of Dean, Academic with a copy to CDC and Dean, IRAA along with the official communication received from the concerned organization in this regard.

4. If the number of **missed classes** (due to internship) is **not beyond 25% of the total number of classes in a course** then the student shall **not be eligible for the additional 10% attendance relaxation.**

5. Such students will have to **report at the Office of Dean, Student Welfare** for joining / Physical Registration / Reporting **within 2 (two) days of completion of their internship.** In case of holiday / weekend, the student has to report on the next working day.

6. The **period** to be counted **for relaxation of attendance** of such students will be up to their **internship end date + 2 days (or in case of holiday / weekend, the next working day)** and they will be eligible for attendance relaxation **of only 10% up to this date.**

7. **Under no circumstances** any such student will be eligible for **attendance relaxation beyond 10%.**

8. If any student *(falling under para 2)* **misses** his / her **classes** beyond the additional 10% attendance relaxation provided, s/he will be **marked as an attendance defaulter** in the respective course(s).

   Example:

   For a 14 lecture hour course, if any student misses more than 4 classes – s/he will be treated as attendance defaulter in that course.
   For a 28 lecture hour course, if any student misses more than 9 classes – s/he will be treated as attendance defaulter in that course.
   For a 42 lecture hour course, if any student misses more than 14 classes – s/he will be treated as attendance defaulter in that course.
   For a 56 lecture hour course, if any student misses more than 19 classes – s/he will be treated as attendance defaulter in that course.

9. On their return, such students *(falling under para 2)* will also have to **submit** the copy of the **internship completion certificate bearing the start and end of their internship** i.e. their internship period to both the **CDC and the office of Dean, Academic.** If they **fail to do so**, they will **not** be provided additional 10% attendance relaxation.

10. **Under no circumstances** these students will be allowed to be **exempted from the mandatory evaluation process** of the Institute; such as Quizzes, Assignments, Mid-Semester, End Semester examination etc.

11. Such students will have to **mandatorily return** from their internship **before the Mid-Semester Examination**.

12. The student *(falling under para 2)* **who have been granted additional 10% attendance relaxation** for such internships **will not be eligible for any other kind of attendance relaxation** such as participation in either CDC related activities, representing the Institute, cultural/technological events, etc. in the same semester.

13. Such students *(falling under para 2)* will have to **submit Form A6** (available on the Institute's website) **for additional 10% attendance relaxation** in the Office of Dean, Academic **before the end of classes** of that semester, attaching the relevant Office Orders/ OMs issued in this regard to the concerned student along with the copy of the internship completion certificate; failing which they may not be granted attendance relaxation.

14. The students **proceeding for international internships** will have to **apply** for the same through the **relevant internship form** (available on the Institute's website) duly approved by the respective HoDs and forwarded by the Dean, IRAA.

15. The office order of such internships shall be issued by the Office of Dean, Academic with a copy to the Dean, IRAA; Dean, Student Welfare; CDC and the concerned HoD.

27/03/2024

Dean (Academic)

Copy to:

1. Director / Deputy Director / Registrar
2. Dean, Student Welfare / Dean, IRAA / PIC, CDC / All HoDs
3. Associate Dean (IT & NI) / Associate Dean, UG / FIC, UG
4. All UG students

Modification in the certain rules of Phd Program manual

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD
OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/707 09 April 2024

NOTIFICATION

MODIFICATION OF CERTAIN RULES IN THE PH. D. PROGRAM MANUAL

The Senate in its 32nd meeting held on 20th March 2024 has approved the following changes in the Ph. D. manual pertaining to UGC (Minimum Standards and Procedures for Award of Ph. D. degree) Regulations, 2022 –

1. For candidates seeking admission to Ph. D. after 4 year / 8 semester bachelor's degree, a minimum aggregate percentage / grade equivalent of 75% should have been obtained in the bachelor's degree. A relaxation of 5% marks or its equivalent grade may be allowed for those belonging to SC / ST / OBC (NCL) / PwD / EWS category.
2. The maximum duration for Ph. D will be six (6) years. A maximum of additional two (2) years may be given to scholars, after completion of their extension/re-registration process as per Institute rules, for completion of their Ph. D. program; Provided, the total period for completion of Ph. D program should not exceed eight (8) years from the date of admission in the Ph. D. program.
   Provided further that, Female Ph. D. scholars and Persons with Disabilities (having more than 40% disability) may be allowed an additional relaxation of two (2) years, i.e. the total period for completion of a Ph. D program in such cases should not exceed ten (10) years from the date of admission in the Ph. D. program.
   Consequently, existing Ph.D. scholars who are female or belong to PwD category (having more than 40% disability) having extension of Ph.D. upto 7th/8th year may apply for further extension three weeks before completion of their existing extension, as per rules.
   Other Ph.D. scholars who have got extension upto 7th year may also apply for further extension three weeks before completion of their existing extension, as per rules.
3. Female scholars may be provided Maternity Leave / Child Care Leave for up to 240 days in the entire duration of the Ph. D. program.
4. Only the permanent faculty members having a Ph.D. degree and appointed as Assistant Professor, Associate Professor or Professor in this Institute can become the Research Supervisor of a Ph.D. scholar enrolled in this Institute. Such recognized Research Supervisors cannot be the Research Supervisors of Ph.D. scholars enrolled in other institutions. They can only act as Co-supervisors in such cases.
5. Faculty members with less than three (3) years of service before superannuation shall not be allowed to take new research scholars under their supervision. However, such faculty members can continue to supervise Ph.D. scholars who are already registered until superannuation, and as a Co-Supervisor after superannuation, but not after attaining the age of 70 years.

09/04/2024
Dean (Academic)

Copy to:

1. Director / Deputy Director / Registrar
2. All HoDs / Associate Dean (IT & NI)
3. All Faculties / Chairperson, PG-Ph. D. Admission
4. AD (PG) / DR (Acad) / AR (PG)
5. Ph.D. scholars

Modalities for summer semester under NEP system

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD
(OFFICE OF THE DEAN ACADEMIC)

No.IITISM/DAC/710 16.04.2024

NOTIFICATION

MODALITIES FOR THE SUMMER SEMESTER UNDER NEP SYSTEM UNTIL THE EXISTING/OLD COURSES OF CBCS REGIME PHASE OUT

With the implementation of NEP 2020 for all the programs run in this Institute from MS 2024-25, it is imperative to gradually (semester-wise) phase out the existing/old CBCS regime to maintain uniformity of courses and templates in future.

For the students having **backlog/dropped courses** of **existing/old CBCS regime**, all such courses will be offered **only in the upcoming Summer Semesters** irrespective of their course category viz. IC, DC, DP, ESO, DE, OE, DC/DE, DC/OE, DE/OE etc. or the semester in which they were initially offered.

The restriction in min. no. of students required to run a course in the **summer semester** may also be waived for such courses. The max. limit of courses to be registered by a student having backlog/dropped courses of existing CBCS regime may be enhanced to three (03). [Two (02) modular course will be treated as one (01) full course]. They may also be allowed to take practical lab courses; audit course, like CCS, Internship, etc.; and/or one modular course over the enhanced limit of courses.

Note - <u>All students having backlog/dropped courses in the existing/old CBCS regime may please take note of this new arrangement to clear their backlogs seamlessly.</u>

16/04/2024
Dean (Acad)

Copy to:

1. Director / Dy. Director
2. All Faculty Members
3. Registrar / Dr (Acad)
4. All Students

Scholarship for Dual degree/ Int. M.Tech. students

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD
OFFICE OF THE DEAN (ACADEMIC)

No: IIT(ISM)/DAC/720 **Date: 10th Jun, 2024**

NOTICE

Scholarship for Dual Degree / Integrated M.Tech. Students

Applications are invited for reimbursement of Financial Assistantship from the eligible students registered in the 9th Semester of Dual Degree / Integrated M.Tech. programs. To apply for availing the assistantship, the students are required to submit Form No. UG 1 (enclosed and available under the Forms section of the Academic page at the Institute's website) to **reg_pg@iitism.ac.in** latest by **10/07/2024**. Applications received after the last date will not be considered.

The criteria for availing the Financial Assistantship for Dual Degree / Integrated M.Tech. students are as follows:-

1. The Financial Assistantship will be awarded to the students in the 5th year if they have qualified GATE or have been awarded a CGPA of 8 or above at the end of the 4th year.
2. The students are required to provide teaching assistance of 8 hours/week.
3. A minimum SGPA of 6.5 on a scale of 10 for UR/OBC students and SGPA of 6.25 for SC/ST/PwD students are required for the continuation of Financial Assistantship. The continuation of assistantship during each semester is contingent upon academic performance and it will be stopped if the academic performance is poor.
4. The maximum duration of the Assistantship is 2(two) semesters for Dual Degree / Integrated M.Tech. students.

Dean (Academic)

Encl: Form No: UG1

Copy to
1. Director
2. Dy. Director
3. Associate Dean (PG)
4. Concerned HODs
5. DR (F&A)/DR (Acad)/AR (PG)
6. DR (Acad)- For uploading notice on the website

Form No: UG1

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD
OFFICE OF THE DEAN (ACADEMIC)

FORM FOR SCHOLARSHIP
(DUAL DEGREE AND INT M.TECH STUDENTS)

1.	Name of Student									
2.	Admission No.							Department		
3.	Program (Put √ Mark)	Dual Degree		Integrated M.Tech				Branch		
4.	Institute Email ID									
5.	Contact Number									
6.	SGPA of all Previous Semesters									
	I Semester		II Semester		III Semester		IV Semester			
	V Semester		VI Semester		VII Semester		VIII Semester			
7.	CGPA after completion of VIII Semester									
8.	Details of GATE Examination **(To be provided by the students who appeared and qualified)**									
	Year of Examination									
	Category (Put √ Mark)	GEN		OBC		SC		ST		
	Qualifying Marks (Cut-off)			Marks Obtained						

Encl: **Please attach a copy of GATE Score Card, if applicable.**

I do here by declare that the information provided by me in this application is true, complete and correct to the best of my knowledge and belief.

Date: _____ Signature of Student: _____

FOR OFFICE USE ONLY

VERIFICATION: The facts, as stated above are **CORRECT / NOT CORRECT** as per records available.

Observations, if any: _____

Date: _____

Signature of Dealing Assistant

AR (Academic - (UG/ PG) / DR (Academic)

Associate Dean (Academic – PG) / Dean (Academic)

Start of student mentorship programme for UG students

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/724 04.07.2024

NOTIFICATION

START OF STUDENT MENTORSHIP PROGRAM FOR UG STUDENTS

In order to help Institute's Undergraduate Program students effectively deal with the challenges, if any, faced during their campus life and to help them choose and follow their career paths, a **Student Mentorship Program** (SMP) is being initiated for all UG students of this Institute. The Student Mentorship Program will start from MS 2024-25.

The following are the broad guidelines for the **Student Mentorship Program** -

(i) All UG students admitted in a department will be divided into small groups by their respective department. Each group of UG students will then be assigned one mentor faculty member from their own department by the respective HoD.

(ii) The mentor faculty member will monitor the assigned mentee students closely and help them effectively deal with their academic, non-academic and personal issues on a regular basis.

(iii) All mentor faculty members will provide their mobile number to their mentees and will also have the mobile number of their mentees. For ease of communication, the mentors will form a whatsapp group with their mentees.

(iv) The mentors will try to resolve all the student issues at their end. However, if the need arises, a mentor may guide his/her mentee to visit the specific department for more clarification on the matter. The mentors may also take the help of their HoD in case any issue needs HoD's intervention.

(v) The mentors must meet their mentees fortnightly and on the next day submit a report regarding their meeting with the mentees to their respective HoDs. The HoD will examine the reports submitted by the mentors and identify the issues, if any, that need to be addressed at the departmental/Institute level.

(vi) The HoD will submit a consolidated monthly report of all the mentor/mentee meetings conducted by the departmental mentors till the last day of a month to Assoc. Dean (UG) / FIC (UG) on email by 1st day of the next month. The mentee related issues, if any, identified by the HoD that were addressed/not addressed at the department level must be mentioned in the report. The issue (s) identified to be addressed at the Institute level must also be clearly mentioned in the report sent by the HoD.

(vii) Assoc. Dean (UG) / FIC (UG) will scrutinize the HoD report and report the issues that need to be addressed at the Institute / department level to Dean

(Academic) by the 10th day of the month in which the HoD report has been received.

(viii) Dean (Acad) will take the further course of action on the reported matters or will inform the respective authorities about the further course of action to be taken on the reported matters, as deemed appropriate in those matters.

A provision to download the details of all UG students registered in UG program of a department will be provided to the HoDs soon by the MIS team. The respective HoDs are requested to start working towards successful implementation of the Student Mentorship program.

04/07/2024

Dean (Academic)

Copy to:

1. Director/Deputy Director
2. All Deans, HoDs and Registrar
3. AD (PG), FIC (UG)
4. AD (IT & N), FIC (Automation) – For necessary changes in MIS
5. DR (Acad), AR (PG), AR (UG)
6. All UG Students

Standard operating procedure for round year admission to PhD preparation

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/ 725 04.07.2024

NOTIFICATION

Standard Operating Procedure for round the year admission to Ph.D. program

At present, the Ph.D (Regular- Institute's Assistantship) admission are usually taking place in the Monsoon (Phase-I) and Winter (Phase-II) semesters. However, for externally funded candidates and for part-time Ph.D. candidates, the admission process is open round the year. As per the approval of the competent authority, from the session 2024-25, Ph.D. admission will be conducted round the year for all regular, part-time and externally funded candidates. The applications received for admission will be processed by the respective departments in coordination with the Institute's Ph.D. admission cell. The final joining process after payment of admission fee by the selected candidates will be taken care of by Academic Section after receiving from admission cell the final list of candidates who have paid their admission fee.

The following Standard Operating Procedure will be followed round the year for Ph.D. admissions (for regular, part-time, external candidates):

1. **Preparation & Publication of Information Brochure (IB):**

   (i) The Information Brochure will be prepared by the Admission Cell. After approval of Competent Authority, the same will be published on the admission portal by the Automation Cell.

   (ii) The applicable seat matrix will be prepared and regularly updated by the Admission Cell. The departments will have to select candidates as per category wise vacancies available in their respective programs.

2. **Call for applications :**

   The admission to the Ph.D. program (regular, part-time, externally funded mode) will be conducted throughout the year. For the purpose, a standing call for application will be hosted on Ph.D. admission portal.

3. **Application processing:**

   (i) Applications will be received on MIS/application portal.

   (ii) The modules for applying for Ph.D. admission will be operational throughout the academic year.

   (iii) The applications received will be accessible to the DPGC conveners and Heads of the respective departments throughout the year via MIS/application portal.

(iv) The applications will be processed on monthly basis. The application received up to 1st day of a month will be processed during the next 15 days of the same month by the DPGC of the respective departments. The application received after 1st day of a month will be processed next month. The detailed timeline for the processing of the applications are mentioned in the Table-1

Table -1 : Timeline for processing of applications

Particulars	**Schedule**
Applications received till	1st day of the month
Scrutiny, Interview & recommendation (by the concerned department)	On or before 15th day of the month
Approval & publication of result (by Admission Cell)	20th day of the month
Fee payment (the proportionate fee will be applicable as approved.)	Up to 25th of the month
Physical Document verification (by Academic section) and date of Joining Ph.D. program	Any working day during 1st week of the next month

(v) The eligibility of a candidate is determined by the DPGC of the respective department through evaluation of candidate's credentials provided in the application against the eligibility criteria of admission to the Ph.D. program as published in Ph.D admission IB and Ph.D. manual. Based on the no. and quality of applications received, the department may apply any additional criteria to shortlist the candidates for the next stage / interview.

(vi) The eligible/shortlisted candidates, as applicable, will be interviewed by the committee comprising of the following :

(a) Head of the Department - Chairperson
(b) All the members of the DAC - Members
(c) One faculty from other department - Member (as invited by HoD / Chairperson)
(d) DPGC Convenor - Member Secretary

(vii) All communications regarding call for interview to the candidate(s) will be made by the Head or DPGC convenor.

(viii) The list of candidates recommended for admission will be sent by the respective HoD to Admission Cell. The consolidated list of candidates recommended for admission by each department will be sent by Admission Cell for the approval of the Chairperson Senate through Dean (Academic).

(ix) The final list of candidates provisionally selected for admission will be published on the website by admission cell or an offer for admission will be sent to the candidates on email, as applicable.

4. Reporting and Joining:

(i) The candidates offered provisional admission will pay the applicable fee and fill the registration form provided by the MIS, as informed to them by Admission cell. The admission no. will be generated for all such candidates.

(ii) The list of candidates who have paid the applicable fee along with their complete details will be shared by Admission cell with the Office of Dean (Acad) as well as with the Office of Dean (SW) by 26th Day of the month.

(iii) Physical verification of documents will be conducted by academic section during first week of the next month. The date of reporting will be kept flexible and the candidates may be allowed to report on any working day in the month, if required. The candidates' profiles will be activated on MIS after physical verification of documents.

(iv) The candidates will then report in their respective department for completion of their PH2 and PH3 forms.

(v) The candidates will also be required to visit office of Dean (SW) mandatorily and get themselves marked in MIS as physically registered.

A proportionate amount of fee will be charged from the candidates, as per their month of reporting given to them upon admission, if the reporting date is not the same as the date given to the candidates joining at the start of a semester.

04/07/2024

Dean (Academic)

Copy to:

1. Director/Deputy Director
2. All Deans, HoDs and Registrar
3. Chairperson PG-Ph.D. Admission
4. AD (PG), AD (HM), FIC (UG)
5. AD (IT & N), FIC (Automation) – For necessary changes in MIS
6. DR (Acad), DR (SW), AR (Adm), AR (PG)

Minimum No. Of Courses Required To Be Done For The Completion Of Coursework In Ph.D

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/727 09 July 2024

NOTIFICATION

MINIMUM NO. OF COURSES REQUIRED TO BE DONE FOR THE COMPLETION OF COURSE WORK IN PH.D

The Senate in its 33rd meeting held on 6th June 2024 has approved to reduce the minimum no. of courses required to be completed for course work in Ph.D. program. Consequently, for the scholars enrolling for course work in Ph.D. from Monsoon Semester 2024-25 and onwards –

(i) The minimum no. of courses required to be successfully completed with the required CGPA will be four (DC/DE/OE etc., as applicable) for course work [i.e. 4 + 2(S/X)].

(ii) For scholars enrolled in Ph.D. on the basis of their B.Tech degree, the minimum no. of courses required to be successfully completed with the required CGPA will be six (DC/DE/OE etc., as applicable) for course work [i.e. 4 + 2 + 2(S/X)].

(iii) The respective DSC of a scholar may prescribe additional courses to be completed by that scholar, if the need arises.

(iv) Registration and award of S grade in Research Methodology as well as in Research and Technical Communication courses, after the recommendation of the respective DSC, upon fulfilment of the research publication criterion for pre-submission seminar in Ph.D., has also been allowed.

09/07/2024

Dean (Academic)

Copy to:

1. Director/Deputy Director
2. All Deans/ All HODs/ Registrar
3. AD (PG)/ FIC (UG)/ FIC (Automation)
4. DR (Acad)/ AR (PG)

Authority assigned to Dean Academic for approving all academic related matters

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/741

NOTIFICATION

20th August, 2024

AUTHORITY ASSIGNED TO DEAN (ACADEMIC) FOR APPROVING ALL ACADEMIC RELATED MATTERS/FORMS (EXCEPT POLICY DECISIONS).

The Senate has approved that Dean (Academic) will be the final authority to approve all academic related regular forms/matters (except policy decisions) to have greater administrative efficiency and faster resolution of student related matters.

Dean (Academic)

Copy to:

1. Director/Deputy Director
2. Registrar
3. All Deans/ Associate Deans
4. All HODs
5. DR (Acad)/ AR (PG)/ AR(UG)
6. Academic Section

Regarding processing of applications of International students for admission

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/742

NOTIFICATION

20th August, 2024

REGARDING PROCESSING OF APPLICATIONS OF INTERNATIONAL STUDENTS FOR ADMISSION.

The Senate has decided that the applications of the international students received by the IRAA Office will be forwarded to the respective DPGC for further scrutiny. The respective DPGC will send it back to Dean (IRAA) after scrutiny. The consolidated list of eligible / not eligible candidates prepared by the office of Dean (IRAA) after due scrutiny may then be sent to Dean (Academic) for onward submission for approval to the Director.

Dean (Academic)

Copy to:

1. Director/Deputy Director
2. Registrar
3. Dean (IRAA)/All Deans/ Associate Deans
4. Chairperson PG-Ph.D. Admission
5. All HODs
6. AD (PG)/ DR (Acad)/ AR (PG)/ AR(UG)

Regarding The Examination Board And Ph.D. Thesis Evaluation.

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/743

NOTIFICATION

20th August, 2024

REGARDING THE EXAMINATION BOARD AND PH.D. THESIS EVALUATION.

The Senate has decided to consider allowing the following matters being taken up by the Examination Board to be taken care of at Dean (Academic)'s end instead of doing a meeting of Examination Board for such matters:

(i) Appointment of External Examiners for evaluation of Ph.D. Thesis of a scholar.
(ii) Approving the final Viva Voce Reports of Ph.D. scholars and putting up the final list of scholars before the Senate for its recommendation to the BoG for award of Degree.

The Ph.D. thesis evaluation reports received by the Office of Dean (Academic) from 1 Indian and 1 foreign examiners will be processed. after waiting for the evaluation report of the third examiner up to 1 month from the date of sending the Ph.D. thesis to the respective examiners.

Further. the list of external examiners for evaluation of Ph.D. thesis should be recommended by the DSC and forwarded to Dean (Academic) after due scrutiny by the respective HoDs regarding area of research of the proposed examiners.

The final Ph.D. Thesis can be submitted to the Institute Library through email.

20/08/2024

Dean (Academic)

Copy to:

1. Director/Deputy Director
2. Registrar
3. All Deans/ Associate Deans
4. PIC (Library)
5. All HODs/ Faculties
6. AD (PG)/ DR (Acad)/ AR (PG)/ AR(UG)

Withdrawal From A Course After The Conduct Of Mid Semester Examination

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/746

NOTIFICATION

20th August, 2024

WITHDRAWAL FROM A COURSE AFTER THE CONDUCT OF MID SEMESTER EXAMINATION.

The Senate has decided to provide a provision to students to withdraw from a course after the conduct of mid-semester examination.

Dean (Academic)

Copy to:

1. Director/Deputy Director
2. Registrar
3. All Deans/ Associate Deans
4. All HODs
5. AD (PG)/ DR (Acad)/ AR (PG)/ AR(UG)

Necessary Requirements to be fulfilled for PwD students and approved pool of scribes

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD
OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/818 — 11th September 2024

NOTIFICATION

NECESSARY REQUIREMENTS TO BE FULFILLED FOR PWD STUDENTS AS PER RPWD (AMENDMENT) RULES, 2024 AND APPROVED POOL OF SCRIBES

The Senate has approved to accommodate the necessary requirements in terms of Designing Accessible and Inclusive curriculum guidelines notified under RPwD (Amendment) Rules. 2024. to make the teaching-learning process, assessment, evaluation and campus life more inclusive and acceptable for all categories of PwD students. All HoDs are requested to propose suitable changes that can be implemented in this regard for further deliberation centrally to finalize the same for earliest implementation. The DAC minutes must be sent in this regard by 20th September 2024 to dracad@iitism.ac.in.

Further, the academic department wise list of technical staff included in the common pool of scribes to help the eligible PwD students of Institute is enclosed. The scribes used by the respective PwD students of the Institute, shall be paid a fixed honorarium @Rs.200/- per hour for the academic year 2024-25. All HoDs are requested to release their respective staff members from the pool of scribes, upon receiving a request from the eligible PwD students through the academic section, for helping those PwD students as scribe during examinations.

All HoDs are also requested to ensure that all faculty members in their department provide sufficient compensatory time (Minimum 20 minutes per 1 hour of examination) to the PwD students (Deptt. wise list of PwD students attached for reference).

11/09/2024
Dean (Academic)

Copy to:

1. Director/Deputy Director
2. Registrar
3. All Deans/ Associate Deans
4. All HODs
5. DR (Acad)/ AR (PG)/ AR(UG)

1. संक्षिप्त नाम और प्रारंभ-

(1) इन नियमों को दिव्यांगजन अधिकार (संशोधन) नियमावली, 2024 कहा जाए।

(2) ये आधिकारिक राजपत्र में उनके प्रकाशन की तारीख से लागू होंगे।

2. दिव्यांगजन अधिकार नियमावली, 2017 में, नियम (15) में, उप-नियम (1) में, खंड (द) के पश्चात् निम्नलिखित खंड को अंत: स्थापित किया जाएगा, अर्थात्:-

"(ण) दिनांक 19 जनवरी, 2024 की अधिसूचना संख्या फा.सं.एन.11018/01/2024 के माध्यम से उच्चतर शिक्षा विभाग, शिक्षा मंत्रालय, भारत सरकार की अधिसूचना में यथा विनिर्दिष्ट उच्चतर शैक्षणिक संस्थानों और विश्वविद्यालयों के लिए सुगम्यता दिशानिर्देश और मानक।"

[फा. सं. I-14002/3/2022-एआईसी]

राजीव शर्मा, संयुक्त सचिव

नोट: दिव्यांगजन अधिकार नियमावली, 2017 को दिनांक 15 जून, 2017 की अधिसूचना संख्या, सा.का.नि. 591(अ.) के माध्यम से भारत के राजपत्र, असाधारण, भाग II, खंड 3, उप खंड (i) में प्रकाशित किया गया था और दिनांक 20 जून, 2024 की **सा.का.नि.** 343 (अ.) के जरिए पिछली बार संशोधित किया गया था ।

MINISTRY OF SOCIAL JUSTICE AND EMPOWERMENT

[Department of Empowerment of Persons with Disabilities (Divyangjan)]

NOTIFICATION

New Delhi, the 25th June, 2024

G.S.R. 358(E).—Whereas a draft of certain rules to amend sub-rule (1) of rule 15 of the Rights of Persons with Disabilities Rules, 2017 were published, as required by sub-section (1) of section 100 of the Rights of Persons with Disabilities Act, 2016 (49 of 2016), vide G.S.R. 89 I, dated the 1st February 2024 in the Official Gazette of India, Extraordinary, Part-II, section 3, sub-section (i), inviting objections and suggestions from all persons likely to be affected thereby, before the expiry of thirty days from the date on which the copies of the Official Gazette in containing the said notification was made available to the public;

And whereas, copies of the said notification were made available to the public on the 5th March, 2024;

And whereas, the objections and suggestions received from the public were considered by the Central Government;

Now, Therefore, in exercise of the powers conferred by sub-sections (1) and (2) of section 100 of the Rights of Persons with Disabilities Act, 2016 (49 of 2016), the Central Government hereby makes the following rules further to amend the Rights of Persons with Disabilities Rules, 2017, namely:-

1. Short title and Commencement.-

(1) These rules may be called the Rights of Persons with Disabilities (Amendment) Rules, 2024.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. In the Rights of Persons with Disabilities Rules, 2017, in rule 15, in sub-rule (1), after clause (n), the following clause shall be inserted, namely:-

"(o) Accessibility Guidelines and Standards for Higher Education Institutions and Universities as specified. in the notification of the Department of Higher Education. Ministry of Education. Government of India vide notification number F. No. N-11018/01/2024 dated 19th January. 2024".

[F. No. I-14002/3/2022-AIC]

RAJEEV SHARMA. Jt. Secy.

Note: The Rights of Persons with Disabilities Rules. 2017 were published in the Gazette of India. Extraordinary. Part II. section 3. sub-section (i) *vide* notification number G.S.R. 591 (E). dated the 15th June. 2017 and was last amended *vide* G.S.R. 343 (E) . dated the 20th June. 2024.

Uploaded by Dte. of Printing at Government of India Press. Ring Road. Mayapuri. New Delhi-110064
and Published by the Controller of Publications. Delhi-110054.

2.1.2.4 Short Stature/Dwarfism

Specific Needs:

- May need support with seating and mobility.
- May have specific needs related to associated vision, physical, hearing and speech disabilities.
- May need preferential seating to participate in ongoing activities
- May need emotional-behavioral & psycho-social support.
- May require assistance in the use of infrastructure or ICT.

2.1.2.5 Muscular Dystrophy

Specific Needs:

- May need assistance with sitting, mobility, transfers and ambulation.
- May experience difficulty in breathing.
- May have limitations in speech and communication.
- May experience difficulty in hand manipulations.
- May require frequent therapy, surgery, or medication.
- May need emotional-behavioral & psycho-social support.
- May require assistance in the use of infrastructure or ICT.
- May need preferential seating to participate in ongoing activities.

2.1.3 Visual Disabilities

2.1.3.1 Blindness and Low Vision

Specific Needs:

- May access information in a variety of ways: braille, audio, enlarged print, digital formats, screen reading softwares or other tactile and sensory systems
- May need assistance with orientation and mobility.
- May need preferential seating to participate in ongoing activities
- May need support in concept development.
- May need emotional-behavioral & psycho-social support.
- May require assistance in the use of infrastructure or ICT.

- May require frequent therapy or medication.

2.1.4 Hearing Disabilities

2.1.4.1 Deaf and Hard of Hearing

Specific Needs:

- May need support in speech and communication.
- May need to learn Indian Sign Language (ISL) and communication with all.
- May need assistance in understanding verbal information/directions e.g. difficulty to hear sounds like a class bell, announcements etc.
- May need preferential seating to participate in ongoing activities
- May require frequent therapy or surgery.
- May need to use devices like hearing aids and cochlear implants.
- May require assistance in the use of infrastructure or ICT.
- May need emotional-behavioral & psycho-social support.
- May require note taking assistance through technology or alternative means such as through peers, etc.
- Providing transition support from school to college or graduation to post graduation, etc.
- Offering clear instructions or demonstrations

2.1.5 Speech & Language Disability

Specific Needs:

- May have trouble with: Articulation – production of speech sounds; Fluency, rhythm & flow of speech; or Voice, quality of pitch, resonance, or loudness.
- May need support in speech and communication.
- May need emotional-behavioral & psycho-social support.
- May require assistance in the use of infrastructure or ICT
- May require frequent speech therapy or other medical interventions.
- May need preferential seating to participate in ongoing activities.

2.1.6 Intellectual Disability

Specific Needs:

- May need support in speech, communication and social skills.
- May need support in cognitive functioning (decision making, reasoning, problem-solving etc.)
- May need assistance with seating and mobility.
- May need support in hand manipulations.
- May need support to understand information.
- May need support in self-care and daily living skills.
- May need emotional-behavioral & psycho-social support.
- May require assistance in the use of infrastructure or ICT.
- May require frequent therapy or other medical interventions.
- May need preferential seating to participate in ongoing activities.

2.1.7 Specific Learning Disability

Specific Needs:

- May need support in speech, communication and social skills.
- May need emotional-behavioral & psycho-social support.
- May need support to comprehend, speak, read, write, spell or do mathematical calculations.
- May need assistance in understanding verbal and written information/directions.
- May need emotional-behavioral & psycho-social support.

2.1.8 Autism Spectrum Disorder

Specific Needs:

- May need support in speech, communication and social skills.
- May need emotional-behavioral & psycho-social support.
- May have associated intellectual or behavioral conditions.

- May need preferential seating to participate in ongoing activities.
- May need support in cognitive functioning (reasoning, problem-solving, etc)
- May require assistance in the use of infrastructure or ICT.
- May be sensitive to bright lights, loud noises, busy hallways, textures, smells etc
- May require frequent therapy or medication.

2.1.9 Mental Illness

Specific Needs:

- May need support in speech, communication and social skills.
- May need emotional-behavioral & psycho-social support.
- May have associated intellectual or behavioral conditions.
- May need assistance in academic activities due to difficulties in concentration, memory, distractibility, impulsiveness, irritability, fear, anxiety etc.
- May need support in cognitive functioning (reasoning, problem-solving etc.) due to disorders of Thinking, Mood, Perception, Orientation, Memory that grossly impairs judgment, behaviour, capacity to recognize reality, or ability to meet ordinary demands of life.
- May need preferential seating to participate in ongoing activities.
- May require assistance in the use of infrastructure or ICT.
- May be sensitive to bright lights, loud noises, busy hallways, textures, smells etc.
- May require frequent therapy or medication.

2.1.10 Chronic Neurological Condition – Multiple Sclerosis

Specific Needs:

- May need support in motor and/or fine-motor functioning, locomotor and non-locomotor functioning.
- May need assistance with sitting and mobility.

- May need support in hand-functioning to manipulate objects, turn pages, write with a pen or pencil, type on a keyboard, and/or retrieve study material.
- May require frequent therapy, surgery, or medication.
- May need preferential seating to participate in ongoing activities
- May require assistance in the use of infrastructure or ICT.
- May need emotional-behavioral & psycho-social support.

2.1.11 Chronic Neurological Condition – Parkinson's disease

Specific Needs:

- May need support in motor and/or fine-motor functioning, locomotor and non-locomotor functioning.
- May need assistance with sitting and mobility.
- May need support in hand-functioning to manipulate objects, turn pages, write with a pen or pencil, type on a keyboard, and/or retrieve study material.
- May require frequent therapy, surgery, or medication.
- May need preferential seating to participate in ongoing activities
- May require assistance in the use of infrastructure or ICT.
- May need emotional-behavioral & psycho-social support.

2.1.12 Blood Disorder – Sickle Cell Disease

Specific Needs:

- May need support in motor and/or fine-motor functioning.
- May need assistance with seating and mobility.
- May have limitations in visual acuity.
- May need support in hand-functioning to manipulate objects, turn pages, write with a pen or pencil, type on a keyboard, and/or retrieve study material.
- May require frequent therapy, surgery, or medication.
- May need preferential seating to participate in ongoing activities

- May require assistance in the use of infrastructure or ICT.
- May need emotional-behavioral & psycho-social support.

2.1.13 Blood Disorder – Thalassemia

Specific Needs:

- May require frequent therapy or other medical interventions.
- May need support in motor and/or fine-motor functioning.
- May need preferential seating to participate in ongoing activities
- May require assistance in the use of infrastructure or ICT.
- May need emotional-behavioral & psycho-social support.

2.1.14 Blood Disorder – Haemophilia

Specific Needs:

- May require frequent therapy or other medical interventions.
- May need support in motor and/or fine-motor functioning.
- May need preferential seating to participate in ongoing activities
- May require assistance in the use of infrastructure or ICT.
- May need emotional-behavioral & psycho-social support.

2.1.15 Multiple Disabilities

Specific Needs:

- May need support in speech, tactile sign language, communication and social skills.
- May need support in cognitive functioning (reasoning, problem-solving etc.)
- May experience vision or hearing disability
- May have associated intellectual or behavioral conditions.
- May need specific seating to assist in pain relief and postural control.
- May need assistance with seating and mobility.
- May need support in motor and/or fine-motor functioning, locomotor and non-locomotor functioning.

Modification in eligibility criteria for admission in Ph.D.

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD
OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/819 11th September 2024

NOTIFICATION

MODIFICATION IN ELIGIBILITY CRITERIA FOR ADMISSION IN PH.D.

The Senate in its 34th meeting held on 05.04.2024 has approved modification in the eligibility criteria for admission in Ph.D. Accordingly, the modified eligibility criteria for admission to Ph.D. is attached as Appendix – 1 for the information and necessary action.

11/09/2024
Dean (Academic)

Copy to:

1. Director/Deputy Director
2. Registrar
3. All Deans/ Associate Deans
4. All HODs
5. Chairperson, Admission (PG-Ph.D.)
6. DR (Acad)/ AR (PG)/AR (Admissions)

1.3 Eligibility for Admission

The minimum eligibility criteria required for applying for admission to Ph.D. programs of different streams shall be-

1.3.1 Ph.D. in the Engineering Stream

(a) Master's degree in Engineering in the relevant subject with first class/division or a minimum of 60% marks/CGPA of 6.0 (on a 10 point scale),

OR

(b) An applicant must have a Bachelor's degree in engineering with a minimum of 60% marks/CGPA of 6.0 (on a 10 point scale),

OR

(c) An applicant must have a Master's degree in science or an allied area with first class/division or a minimum of 60% marks/CGPA of 6.0 (on a 10 point scale).

1.3.2 Ph.D. in the Science Stream

(a) An applicant must have a Master's degree in the relevant subject with first class/division or a minimum of 60 % marks/CGPA of 6.0 (on a 10 point scale),

OR

(b) An applicant must have a Bachelor's degree in engineering with a minimum of 60 % marks/CGPA of 6.0 (on a 10 point scale),

OR

(c) An applicant must have a Master's degree in science or an allied area with first class/division or a minimum of 60 % marks/CGPA of 6.0 (on a 10 point scale).

1.3.3 Ph.D. in the Humanities and Social Sciences Stream

(a) An applicant must have a Master's degree in the relevant subject, arts, commerce, humanities and social sciences with first class/division or a minimum of 60 % marks/CGPA of 6.0 (on a 10 point scale),

OR

(b) An applicant must have a Master's degree in engineering / technology/science/ commerce / management with first class/division or a minimum of 60 % marks/CGPA of 6.0 (on a 10 point scale),

OR

(c) An applicant must have a Bachelor's degree in engineering with a minimum of 60% marks/CGPA of 6.0 (on a 10 point scale).

1.3.4 Ph.D. in the Management Stream

(a) An applicant must have a Master's degree or equivalent in management or allied areas or engineering / technology with first class/division or a minimum of 60 % marks/CGPA of 6.0 (on a 10 point scale),

OR

(b) An applicant with a Bachelor's degree in engineering with a minimum of 60 % marks/CGPA of 6.0 (on a 10 point scale),

OR

(c) An applicant must have a Master's degree in science/arts/commerce with first class/division or a minimum of 60 % marks/CGPA of 6.0 (on a 10 point scale),

OR

(d) An applicant who has qualified for CA/ICAI/ICMA/CS, with first class/division or a minimum of 60 % marks/CGPA of 6.0 (on a 10 point scale) in Bachelor's degree.

Note:

1. *Bachelor's degree in Engineering means regular full-time Bachelor's degree. A candidate with AMIE or similar degree is not eligible for admission.*
2. *The exact qualification and eligibility requirements, and the list of programs to be offered in a year will be available in the Information Brochure published by the Institute before the start of admission process for every Academic Year.*
3. *For consideration of qualifications obtained from universities/institutes outside India, an equivalence certificate issued by Association of Indian Universities will be required to be submitted along with application.*

1.3.5 Requirement of GATE/NET in Engineering/Science or CAT/GMAT in Management

A. Qualifying NET/GATE is not mandatory for application in Ph.D. in Engineering / Science, if the candidate -

(i) Has done M.Tech/M.E. with first class or first division or with minimum 60% marks or equivalent CGPA or

(ii) Has done B.Tech / B.E. with a minimum CGPA of 8 (on a 10 point scale) or with equivalent percentage from any CFTI or

(iii) Has done B.Tech / B.E. with a minimum CGPA of 8 (on a 10 point scale) or with equivalent percentage from any Institute / University having 1 to 100th rank in Overall category in NIRF India rankings (either in the year of application or in the last year).

(iv) Has applied for part-time Ph.D. and has minimum 2 years of experience in a regular post in PSUs/ Research Organizations/Organizations having MoU with Institute/ Higher Education Institutions approved by UGC/AICTE/globally reputed corporate organizations.

B. Except for the candidates mentioned in para A above, all other eligible candidates as per para 1.3 above, will have to qualify NET/GATE to apply for Ph.D. admission in Engineering / Science.

C. Qualifying CAT/GMAT will be mandatory for applying for Ph.D. in Management. However, for part-time Ph.D. candidates having minimum 2 years of experience in a regular post in PSUs/ Research Organizations/Organizations having MoU with Institute/ Higher Education Institutions approved by UGC/AICTE/globally reputed corporate organizations, the requirement of having CAT/GMAT may be relaxed.

It may be noted that based on number and quality of applications received in an admission cycle, the respective department may also impose additional shortlisting criteria (and shall also publish it while sending calls for interview) to restrict number of eligible applicants to be called for Interview.

Handholding classes for 1st year UG / Preparatory students

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD
OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/820 12th September 2024

NOTIFICATION

HANDHOLDING CLASSES FOR 1ST YEAR UG / PREPARATORY STUDENTS IN THE LANGUAGE OTHER THAN ENGLISH AS CHOSEN BY THEM

All faculty members teaching in 1st year UG programs / Preparatory Courses were requested to submit their interest for offering additional handholding classes of their respective courses in the language other than English for the 1st year UG / preparatory students keen to enrol for the same. The 23 courses for which various faculty members submitted their interest were circulated among the 1st year UG / Preparatory students along with the details of language (other than English) in which the handholding classes for those courses are available for submitting students' interest for enrolment.

Based on the interests submitted by the students, the following is the detail of handholding classes to be offered at least once in a week in MS 2024-25 by the respective faculty members –

S.No.	Admission Number	Department / Discipline	Course Code	Choice of Language	Email of the Faculty	Email of the student
1	24je1104	Applied Geophysics	NMCI101	Hindi	sptiwari@iitism.ac.in	24je1104@iitism.ac.in
2	24JE0744	Engineering Physics	NCSE101	Hindi	chiranjeev@iitism.ac.in	24je0744@iitism.ac.in
3	24JE0745	Engineering Physics	NCSE101	Hindi	chiranjeev@iitism.ac.in	24je0745@iitism.ac.in
4	24JE0745	Engineering Physics	NPHC101	Hindi	rpgiri@iitism.ac.in	24je0745@iitism.ac.in
5	24JE0794	Preparatory	NHSP001	Hindi	mrahmanelt@iitism.ac.in	24je0794@iitism.ac.in

The handholding classes for the above courses may preferably be taken between 06:00 to 7:00 pm and the attendance must also be maintained for the same.
In case the enrolled students request for more classes in a week, the same are allowed to be taken by the respective faculty members. Moreover, if other students are also interested to join these classes in future, they are also allowed to join the same with the permission of the concerned faculty member.

12/09/2024
Dean (Academic)

Copy to:

1. Director / Dy. Director
2. All concerned faculty members and students
3. Registrar

Updated Ph.D credit Requirement

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/ 821 18th September, 2024

NOTIFICATION

UPDATED Ph.D CREDIT REQUIREMENT DETAILS

The Senate approved updated Ph.D credit requirement details under NEP regime is as follows:

Detail of minimum credits required for Ph.D.		
Source of Credits	**Minimum no. of Courses or Credits required**	**Remarks**
Coursework*	4 + 2(including RM, RTC in S/X mode) for eligible PG scholars; 6 + 2 (including RM, RTC in S/X mode) for scholars with B.Tech	To be considered for CGPA of coursework (except RM, RTC).
Research work (Thesis Units)	100 credits (S/X)	Maximum 20 credits of thesis units allowed to be taken in each regular semester
*Registration and award of S grade in Research Methodology as well as in Research and Technical Communication courses, after the recommendation of the respective DSC, upon fulfilment of the publication criterion for pre-submission seminar in Ph.D., is also allowed.		

18/09/2024

Dean (Academic)

Copy to:

1. Director/Deputy Director
2. Registrar
3. All Deans/ Associate Deans/ FIC (Automation)
4. All HODs
5. DR (Acad)/ AR (PG)/ AR(UG)

Consideration of weightage of Phd supervisor and co-supervisor

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/ 823 — 20th September, 2024

NOTIFICATION

CONSIDERATION OF WEIGHTAGE OF PHD SUPERVISOR AND CO-SUPERVISOR

In case of Ph.D scholars where apart from supervisor, a co-supervisor and/or external co-supervisor needs to be appointed, the Senate approved to use the term "Joint Supervisor" for all supervisors, co-supervisors and external co-supervisors. The Senate also approved to consider an equal weightage for all "Joint Supervisors" appointed for a scholar.

The above change is applicable with immediate effect.

20/09/2024

Dean (Academic)

Copy to:

1. Director/Deputy Director
2. Registrar
3. All Deans/ Associate Deans/ FIC (Automation)
4. All HODs
5. DR (Acad)/ AR (PG)/ AR(UG)

Revision in non-credit Units

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/ 825 — 18th September, 2024

NOTIFICATION

REVISION IN NON CREDIT UNITS

The approved revision in Non Credit Units (in NEP regime), as recommended by the DSW Office, is enclosed for the information of all.

18/09/2024
Dean (Academic)

Copy to:

1. Director/Deputy Director
2. Registrar
3. All Deans/ Associate Deans/ FIC (Automation)
4. All HODs
5. DR (Acad)/ AR (PG)/ AR(UG)/ AR(SW)/ SPO

Sl.no.	Program	Discipline (2 units per semester)	NCC/NSS/NSO/ CCS/Yoga (2 units per semester for 1st two years) Sl. No. 1-5 to be assessed during even semesters(2nd & 4th)only & Sl.no. 6-12 to be assessed during odd semester (1st & 3rd) only Under CCS 101 & CCS 102	Community Outreach/ Community Services/ Sports/Student Club Activities/ Cultural Activities/ NVCTI Activities (2 units per semester for 1st two years) Sl. No. 1-5 to be assessed during even semesters(2nd & 4th) only & Sl.no. 6-12 to be assessed during odd semester (1st & 3rd) only	Other CCA or recognition in Inter IIT / Inter University / State / National / International events (during entire period) *	Maximu m non-credit uni ts that can be earned	Minimum noncredit units to be earned for the successful completion of the program [C(50 %)+D (at least 2 units) + E(at least 2 units)+F(Optio nal Or Add on)]= H
A	B	C	D	E	F	G	H
1	B.Tech.	16	4	4	4	28	20
2	B.Tech. with Minor	16	4	4	4	28	20
3	Double Major	20	4	4	4	32	24
4	Dual Degree (Category A/B/C)	20	4	4	4	32	24
5	Int. M.Tech.	20	4	4	4	32	24
6	M.Tech.	8	4	4	4	20	12
	M.Sc. Tech.	12	4	4	4	24	16
8	M.Sc.	8	4	4	4	20	12
9	MBA	8	4	4	4	20	12
10	MBA (BA)	8	4	4	4	20	12
11	MA	8	4	4	4	20	12
12	Ph.D. (Full Time)	2 per sem.	4	4	4	12 + 2 per sem.	40%

Subject: Proposal for Non-credit Units to be implemented w.e.f. MS 2024-25

The following proposed is placed before the Senate to give recommendations for the implementation of changes in line with NEP 2020 on the system of Non-Credit Units to be implemented from MS 2024-25. The following are the details:

Non-Credit Unit & Minimum Units required for each program:

** For participation in Inter IIT / Inter University / State / National / International events, **2 units** will be credited.*

*** For each indiscipline negative 1 unit minimum & maximum up to 4 unit depending upon severity (Discipline grading may be decided by the Office of DSW) will be awarded*

**** Min discipline unit to be decided e.g. 50 % of the total discipline units if 16 then at least 8 and so on.*

#in the event, if any one shortfalls of minimum non-credit units, a make-up test may be conducted under CCS or special programme at the end of courses if required

Thesis Or Project Evaluation In PG Programs

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/826 18th September, 2024

NOTIFICATION

PROPOSAL TO CONTINUE THESIS/PROJECT EVALUATION IN PG PROGRAMS (INCLUDING 5TH YEAR OF INTEGRATED M.TECH/DUAL DEGREE) WITH LETTER GRADE.

The Senate has approved that from MS 2024-25, the project/thesis of PG students will be evaluated with letter grade and the same will also be included in the calculation of their SGPA/CGPA, so that the existing and future PG students will get a chance to improve their CGPA in the final year.

18/09/2024

Dean (Academic)

Copy to:

1. Director/Deputy Director
2. Registrar
3. All Deans/ Associate Deans/ FIC (Automation)
4. All HODs
5. DR (Acad)/ AR (PG)/ AR(UG)

New members of DUGC & DPGC

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No.IIT(ISM)/DAC/836 17.10.2024

NOTIFICATION

DETAILS OF NEW MEMBERS OF DUGC AND DPGC OF ALL DEPARTMENTS

As the term of many of the existing members of DUGC and DPGC (except ex-officio members) is expiring on 18 October 2024, the details of new DUGC and DPGC members nominated by the respective departments and approved by the competent authority is enclosed herewith for the reference of all concerned.

The term of new DUGC and DPGC members (except in case of ex-officio members and student nominees) is valid from **19.10.2024** to **30.06.2026**.

The departments who are yet to nominate student nominees to their respective DUGC/DPGC may complete the process by 21st October 2024.

17/10/2024

Dean (Academic)

Copy to: Director / Dy. Director
All Deans /Assoc. Deans / HoDs
Chairperson, Admissions (PG-Ph.D.) 2025 / Chairman, JEE (Adv.) 2025
Registrar
DR (Acad) / AR (PG) / AR (UG) / AR (Admissions) / AR (IRAA)
Students

Details of Departmental Under Graduate Committee members (DUGC) of All Departments (upto 30.06.2026)

DUGC MEMBERS	DEPARTMENT				
	Applied Geology	Applied Geophysics	Chemical Engg.	Chemistry & Chemical Biology	Civil Engg.
Convener, DUGC	Prof. Kripamoy Sarkar	Prof. S. Maiti	Prof. Mahendra N Nandanwar	Prof. Biswajit Chowdhury	Prof. Sowmiya Chawla
HoD (Ex-Officio Member)	Prof. S. Sarangi	Prof. S. K. Pal	Prof. Aditya Kumar	Prof. Parthasarathi Das	Prof. Srinivas Pasupuleti
DUGC Member	Prof. Sahendra Singh	Prof. S.D.Gupta	Prof. Suresh K Yatirajula	Prof Rohit P John	Prof. Rahul Bhartiya
DUGC Member	Prof. Upama Dutta	Prof. S.Sahoo	Prof. Soumyajit Sengupta	Prof. Chanchal Halder	Prof. Leeza Malik
DUGC Member	Prof. Pranab Das	Prof. P.P.Mandal	Prof. LDNVV Konda	Prof. Niladri Patra	Prof. Bandita Barman
DUGC Member	Prof. Ashutosh Tripathy	Prof. Y.Giri	Prof. Sandip Mandal	Prof. Rashmi Madhuri	Prof. Shushobhit Chaudhary
DUGC Member			Prof. Suman Dutta		Prof. Ankit Srivastava
DUGC Member					
DUGC Member					
Nominated UG Student	Anish Kumar Samal	Dristi Sen			Ms Palak Khandelwal 22 JE 0655
Nominated UG Student	E. Akshara Rao	Raj Sahoo			Mr Yashvardhan Vishal Tripathi

Details of Departmental Under Graduate Committee members (DUGC) of All Departments (upto 30.06.2026)

DUGC MEMBERS	DEPARTMENT				
	Computer Science & Engg.	Electrical Engg.	Electronics Engg.	Environmental Science & Engg.	Fuel, Minerals & Metallurgical Engg.
Convener, DUGC	Prof. Arup Kumar Pal	Prof. P. K. Nayak	Prof. Subindu Kumar	Prof. Suresh Pandian	Prof. Aarti Kumari

HoD (Ex-Officio Member)	Prof. Chiranjeev Kumar	Prof. Sukanta Das	Prof. Ravi Kumar Gangwar	Prof. Alok Sinha	Prof. Shravan Kumar
DUGC Member	Prof. A. C. S. Rao	Prof. P. K. Sadhu	Prof. Jitendra Kumar	Prof. S. Samadder	Prof. Barun Kumar Nandi
DUGC Member	Prof. Pranav Bisht	Prof. A. Baral	Prof. Mrinal Sen	Prof. P. Saravanan	Prof. Pankaj Kumar Jain
DUGC Member	Prof. Saurabh Srivastava	Prof. S. Barik	Prof. Rajeev Kumar Ranjan	Prof. T. Pathania	Prof. Avanish Kumar
DUGC Member	Prof. Subhrangsu Mandal	Prof. D.V. Bhaskar	Prof. Nirupama Mondal	Prof. Riya Dutta	Prof. Subhendu Mishra
DUGC Member		Prof. Shyam A. B.			
DUGC Member					
DUGC Member					
Nominated UG Student	Mr. Bhaskar	Sunny Kumar (22JE0993)			
Nominated UG Student	Ms. Eshita Paliwal	Sumit Kumar Raj (22JE0989)			

Details of Departmental Under Graduate Committee members (DUGC) of All Departments (upto 30.06.2026)

DUGC MEMBERS	DEPARTMENT				
	Humanities & Social Sciences	Management Studies & Industrial Engg.	Mathematics & Computing	Mechanical Engg.	Mining Engg.
Convener, DUGC	Prof. Sangay Tamang	Prof Rashmi Singh	Prof. N Jana	Prof. Subhankar Sen	Prof. R. K. Sinha
HoD (Ex-Officio Member)	Prof. Nirban Manna	Prof Sandeep Mondal	Prof. R. K. Upadhyay	Prof. Somnath Chattopadhyaya	Prof. D. P. Mishra
DUGC Member	Prof. A.K. Behura	Prof Niladri Das	Prof. S. A. Sahu	Prof. Arun Dayal Uday	Prof. Radhakanta Koner
DUGC Member	Prof. Sathya Narayana Sharma	Prof Bibhas Chandra	Prof. S. Mondal	Prof. Swagata Bhaumik	Prof. Siddhartha Agarwal
DUGC Member	Prof. Sruti Kanungo	Prof Sabnam Basu	Prof. A. Das	Prof. Vivek Bajpai	Prof. Dondapati Gopi Krishna

DUGC Member	Prof. Sanatan Mandal	Prof Diti Goswami	Prof. S. Kumawat	Prof. Tanmay Dutta	Prof. Bhaskara Behera
DUGC Member				Prof. Tanweer Alam	
DUGC Member					
DUGC Member					
Nominated UG Student			V Int M . Tech (M&C) CR		Ms. Sanika Kole
Nominated UG Student			VII Int. M. Tech (M&C) CR		Mr. Shriballabha Mahapatra

Details of Departmental Under Graduate Committee members (DUGC) of All Departments (upto 30.06.2026)

DUGC MEMBERS	DEPARTMENT	
	Petroleum Engg.	Physics
Convener, DUGC	Prof. Ashutosh Kumar	Prof. Kaushal Kumar
HoD (Ex-Officio Member)	Prof. Keka Ojha	Prof. Bobby Kachappilly Antony
DUGC Member	Prof. Ajay Mandal	Prof. Tusharkanti Dey
DUGC Member	Prof. Rajeev Upadhyay	Prof. Soumya Bagchi
DUGC Member	Prof. Ajay Suri	Prof. R. Mondal
DUGC Member	Prof. Archana	Prof. R. P. Giri
DUGC Member	Prof. N K Maurya	
DUGC Member	Prof. Raj Kiran	
DUGC Member	Prof. Md. H.Siddique	
Nominated UG Student		Mr. Iliyan Noorani
Nominated UG Student		Mr. Varun Gupta

Details of Departmental Post Graduate Committee members (DPGC) of All Departments (upto 30.06.2026)

DPGC MEMBERS	DEPARTMENT				
	Applied Geology	Applied Geophysics	Chemical Engg.	Chemistry & Chemical Biology	Civil Engg.
Convener, DPGC	Prof. P.R. Sahoo	Prof. S.D.Gupta	Prof. Soubhik Bhaumik	Prof. Sumanta Kumar Sahu	Prof. Smruti Sourava Mohapatra
HoD (Ex-officio member)	Prof. S. Sarangi	Prof. S. K. Pal	Prof. Aditya Kumar	Prof. Parthasarathi Das	Prof. Srinivas Pasupuleti
DPGC Member	Prof. M.K. Mukherjee	Prof. S.Maiti	Prof. Siddhartha Sengupta	Prof. Soumit Chatterjee	Prof. Renu V.

DPGC Member	Prof. A.S. Majumdar	Prof. M. Agrawal	Prof. Paidinaidu Paluri	Prof. Naga Rajiv Lakkaniga	Prof. Pranesh Roy
DPGC Member	Prof. Joseph D'Souza	Prof. Niptika Jana	Prof. Ejaz Ahmad	Prof. Sourav Kumar Dey	Prof. Avinash Kumar Singh
DPGC Member	Prof. Udita Bansal	Prof. Y.Giri	Prof. DK Sandilya	Prof. Asmita Singha	Prof. Abhishek Kumar Pandey
DPGC Member			Prof. Sourav Sengupta		Prof. Sukanta Chakraborty
DPGC Member					
Nominated PG Student	Sandipan Chakraborty	Divya Meena		Priyanshu Yadav	Mr Faijan Ali Ansari 21DR0053
Nominated PG Student	Abhyartha Das	Arpan Pan		Avani Jha	Ms. Swati Sharma 24MT0478

Details of Departmental Post Graduate Committee members (DPGC) of All Departments (upto 30.06.2026)

DPGC MEMBERS	DEPARTMENT				
	Computer Science & Engg.	Electrical Engg.	Electronics Engg.	Environmental Science & Engg.	Fuel, Minerals & Metallurgical Engg.
Convener, DPGC	Prof. Sachin Tripathi	Prof. V. Mukherjee	Prof. M. K. Das	Prof. B. Paul	Prof. Shatrughan Soren
HoD (Ex-officio member)	Prof. Chiranjeev Kumar	Prof. Sukanta Das	Prof. Ravi Kumar Gangwar	Prof. Alok Sinha	Prof. Shravan Kumar
DPGC Member	Prof. Ayan Das	Prof. K. Chatterjee	Prof. Santanu Dwari	Prof. S. Jagadevan	Prof. Shalini Gautam
DPGC Member	Prof. Hari Om	Prof. K.C.Jana	Prof. Amitesh Kumar	Prof. M. Patel	Prof. Kesavan Ravi
DPGC Member	Prof. Pranay Kumar Saha	Prof. Haswanth Vundavilli	Prof. Samrat Mukhopadhyay	Prof. Saifi Izhar	Prof. Gaurav Jha
DPGC Member	Prof. Mauajama Firdaus	Prof. B.K.Naick	Prof. Shalu Rani	Prof. Vittal H	Prof. Kasturi Sala
DPGC Member	Prof. Rajendra Pamula	Prof. Bhawana Singh			
DPGC Member		NIL			
Nominated PG Student	Mr. Gyan Prakash	Vikash Kumar Raushan (22 DR 0271)			
Nominated PG Student	Mr. Kunal Kumar	Priyanka Kumari (24DR0135)			

Details of Departmental Post Graduate Committee members (DPGC) of All Departments (upto 30.06.2026)

DPGC MEMBERS	DEPARTMENT				
	Humanities & Social Sciences	Management Studies & Industrial Engg.	Mathematics & Computing	Mechanical Engg.	Mining Engg.
Convener, DPGC	Prof. Gyan Prakash	Prof Himanshu Gupta	Prof. P. K. Kewat	Prof. Rashmi Ranjan Das	Prof. B. S. Choudhary
HoD (Ex-officio member)	Prof. Nirban Manna	Prof Sandeep Mondal	Prof. R. K. Upadhyay	Prof. Somnath Chattopadhyaya	Prof. D. P. Mishra
DPGC Member	Prof. M. Rahman	Prof Shashank Bansal	Prof. D. Pradhan	Prof. Zafar Alam	Prof. V. G. K. Villuri
DPGC Member	Prof. Shanmugapriya T	Prof Aparna Krishna	Prof. R. Kaligatla	Prof. Suman Saha	Prof. M. S. Alam
DPGC Member	Prof. Sangay Tamang	Prof Preeti Roy	Prof. A. Antony Selvan	Prof. Sarthak Sambit Singh	Prof. Ashok Kumar
DPGC Member	Prof. Sucharita Maji	Prof Esha Saha	Prof. M. Verma	Prof. Deepak Kumar Mandal	Prof. G. Budi
DPGC Member		Prof Debashree Roy		Prof. Antarip Poddar	
DPGC Member					
Nominated PG Student	Neha Yeshvi (24MA0011)		1st Year MSc (M&C) CR		Mr. Jai Prakash
Nominated PG Student	Nantu Shaw (23DR0087)		JRF Represtative		Mr. Mrigank Vishwakarma

Details of Departmental Post Graduate Committee members (DPGC) of All Departments (upto 30.06.2026)

DPGC MEMBERS	DEPARTMENT	
	Petroleum Engg.	Physics
Convener, DPGC	Prof. Vikas Mahto	Prof. Prashant Kr. Sharma
HoD (Ex-officio member)	Prof. Keka Ojha	Prof. Bobby Kachappilly Antony
DPGC Member	Prof. Chandan Guria	Prof. Amitava Adak
DPGC Member	Prof. T K Naiya	Prof. Sudeshna Sen
DPGC Member	Prof. V K Rajak	Prof. E. Kundu
DPGC Member	Prof. Sayantan Ghosh	Prof. S. S. Roy
DPGC Member	Prof. Pawan Gupta	
DPGC Member	Prof. Chandan Sahu	
Nominated PG Student		Ms. Shinjini Pal
Nominated PG Student		Mr. Sunita Brijlal Yadav

Introduction of Joint 5 year Integrated Dual Degree with IIM Mumbai

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/838 21.10.2024

NOTIFICATION

JOINT 5-YEAR INTEGRATED DUAL DEGREE PROGRAM WITH IIM MUMBAI

The Institute is pleased to announce signing of MOU with IIM Mumbai to offer a joint 5-year Integrated Dual Degree Program that leads to award of a B.Tech degree in relevant discipline along with a diploma in management from IIT (ISM) Dhanbad, and an MBA degree from IIM Mumbai. The salient features of this joint 5-year Integrated Dual Degree program are enclosed herewith. The template of this program and other UG programs are also enclosed for the information of all.

Applications will soon be invited from the existing B.Tech students who will pre-register next month for their 4th / 6th Semester (WS 2024-25). The interested students can submit their interest during online pre-registration for WS 2024-25 as per the details provided in the Pre-registration notification to be issued for WS 2024-25 in due course.

From the Academic year 2025-26, the applications for this program will be sought from the 1st year B.Tech students during their pre-registration for 3rd Semester (Monsoon Semester).

21/10/2024

Dean (Academic)

Copy to: Director / Dy. Director
All Deans / Assoc. Deans / HoDs
Registrar
DR (Acad) / DR (F&A) / AR (UG) / AR (PG) / AR (SW)
All UG Students

UG Program Templates with first year courses and Dual Degree Cat D

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/839 23.10.2024

NOTIFICATION

NEW UNDERGRADUATE PROGRAM TEMPLATES (AS PER NEP 2020)

The new UG program templates, as applicable from the batch admitted in MS 2024-25 along with the salient features of new program templates, are enclosed for the reference of all. Please note the change in Dual Degree Category C and addition of Dual Degree Category D. The notification no. IITISM/DAC/838 dated 21.10.2024 stands superseded by this notification with respect to the updated UG Program templates of Dual Degree category C and D.

Kindly note that in addition to the given credits, some non-credit units are also required to be necessarily earned to successfully complete the program {notification dated 18.09.2024 enclosed for reference. Office of Dean (Students' Welfare) will provide the details in this regard in due course/shortly}.

For the UG first year, the department wise list of courses is also enclosed for reference.

23/10/2024

Dean (Academic)

Copy to: Director / Dy. Director
All Deans / Assoc. Deans / HoDs
Registrar
DR (Acad) / AR (UG) / AR (PG) / AR (SW)
All UG Students

Salient Features of New UG Program Templates
(Effective from the batch admitted in MS 2024-25)

The Institute Senate has approved the change in program templates with inclusion of new categories of courses such as Ability Enhancement Courses, Skill Enhancement Courses, Value Added Courses, Engineering Science Compulsory Courses apart from introducing Inter-disciplinary Courses, Non-Credit Units, adding credits to Internships and continuing with Discipline Specific Courses. Choice of Minor/Honours/Mixed Courses has also been incorporated suitably for students to pursue their academic interests in the domains of their choice additionally.

The following are the salient features of the new Program templates implemented in line with NEP 2020 from the new batch of students admitted in MS 2024-25 –

1. The UG students can now choose the option to pursue a Minor (of a different department), an Honours (in the same discipline) or a Mix of courses from Honours/Minor basket (leading to no specific Honours/Minor specialization), as applicable as per their program template. The option in this regard can be submitted only during pre-registration for their 3rd semester. The enclosed program templates may be referred for a better understanding.
2. The B.Tech program students can also choose to enroll for a Dual Degree Category A, B, C or D now from their 3rd semester. The option in this regard can be submitted only during pre-registration for their 3rd semester. The enclosed program templates may be referred for a better understanding. The minimum eligibility requirements will continue to apply.
3. The B.Tech students opting for Dual Degree Category A during pre-registration for 3rd semester are required to choose only Honours in the same discipline. The option of choosing any minor in same/other discipline or choosing an honours of a different discipline will not be allowed.
4. The B.Tech students opting for Dual Degree Category B / C are required to choose only Minor in the discipline of their PG Degree. The option of choosing a Minor in any discipline other than that of their PG degree or the option to choose an honours will not be allowed to such students.
5. The B.Tech students opting for Dual Degree Category D (With MBA from IIM Mumbai) will not be able to choose any honours / minor courses as they will complete the 12 pre-requisite courses of MBA. Such students will get a Diploma in Management upon successful completion of their UG program along with the 12 pre-requisite courses,

subject to fulfilment of other necessary requirements. The Dual Degree Category C students who are enrolled for doing an MBA/MBA (BA) from IIT (ISM) Dhanbad will follow a separate program template that leads to award of a B.Tech. Degree with Minor in management discipline and an MBA/MBA (BA) degree, as applicable in their case.

6. The Integrated M.Tech program students will be able to choose either a minor (of a different department) or a mix of courses from honours/minor basket (leading to no specific honours/minor specialization) from their **3rd semester**. The enclosed program template may be referred for a better understanding.

7. Only the courses offered in a semester that do not have a time table clash will be allowed to be registered.

8. The approved Exit Options will also be shared in due course.

9. The detailed distribution of credits common to all UG entrants in the first year is as given hereunder –

Course Type	**1st Sem (Group I)**	**2nd Sem (Group I)**	**1st Sem (Group II)**	**2nd Sem (Group II)**
IDC – Inter-disciplinary Course	7	3	3	7
DSC – Discipline Specific Course - Core	4	4	4	4
ESC – Engineering Science Compulsory Courses	3	3	3	3
AEC – Ability Enhancement Courses	2	3	3	2
SEC – Skill Enhancement Courses	2.5	3.5	3.5	2.5
VAC – Value Added Courses	3	4	4	3
Total Semester Credits	**21.5**	**20.5**	**20.5**	**21.5**

UPDATED UG PROGRAM TEMPLATES AS PER NEP 2020 (EFFECTIVE FROM THE BATCH ADMITTED IN MS 2024-25)

B.Tech. Program

				DSC – Discipline Specific Course - Core					^Minor or Honours as applicable, or a mix of courses offered by various departments under Minor/ Honours or both (i.e. No single specialization, and with 20+6 credits) as chosen by the student from 3rd Semester						
Semester	IDC [3-0-0]	IDC /VAC Lab [0-0-2]	VAC [3-0-0]	DC [3-0-0] in 1st year, [3-1-0] later	DE [3-0-0]	DP [0-0-2]	HSSE [3-0-0]	ESC# [3-0-0]	Minor (Only DC) [3-1-0]	or Honours (Only DC) [3-1-0]	SDC of the chosen Minor /Practical of chosen Honours [0-0-3]	*AEC/SEC [3-0-0] 2nd year onwards	PR (7th - 6Cr) (8th - 10Cr)	Internship (S/X)	Graded Credits
1st & 2nd	3	2	2	2		2		2				5			42
3rd				3		2		1				1			20
4th				3		2		1				1			20
5th				2	1	2	1		1	1	1				21.5
6th				2	1	1	1		1	1	1				20.5
7th					2				1	1	1		1	1	21.5
8th									2	2	1		1		19.5
Course Count	3	2	2	12	4	9	2	4	5	5	4	7	2	1	**165 credits**
Credit Count	9	2	6	46	12	9	6	12	20	20	6	17	16	4	

^Minor, if chosen, must be of a different department / Honours chosen must be of the same department. No specialization means taking different courses and their respective SDC/practicals across Minors and/or Honours offered by various departments

Third Semester onwards ESC of the student's primary department may also be allowed

* AEC / SEC shall continue to be offered in two Groups during 3rd and 4th Semesters

Dual Degree (Category - A) Program

				DSC – Discipline Specific Course - Core					Only Honours allowed*		Only PG Courses							
Semester	IDC [3-0-0]	IDC /VAC Lab [0-0-2]	VAC [3-0-0]	DC [3-0-0] in 1st year, [3-1-0] later	DE [3-0-0]	DP [0-0-2]	HSSE [3-0-0]	ESC# [3-0-0]	Honours (Only DC) [3-1-0]	Practical of Honours [0-0-3]	ADD [DCPG with Credit 3-1-0]	ADD [DEPG with Credit 3-0-0]	ADD [DPPG with Credit 0-0-3]	ADD [TU]	**AEC/SEC [3-0-0] 2nd year onwards	PR (7th - 6Cr) (8th - 10Cr)	Internship (S/X)	Graded Credits
1st & 2nd	3	2	2	2		2		2							5			42
3rd				3		2		1	1	1					1			**25.5**
4th				3		2		1	1	1					1			**25.5**
5th				2	1	2	1				1		1					**21.5**
6th				2	1	1	1		1		1		1					**24.5**
7th					2				1	1	1	1	1			1	1	**30**
8th									1	1	2	1 (RM)	2			1		**29.5**
9th											1	1	1	1				**28.5**
10th												1		1				**23**
Course Count	3	2	2	12	4	9	2	4	5	4	6	4	6	2	7	2	1	**250 credits**
Credit Count	9	2	6	46	12	9	6	12	20	6	24	12	9	40	17	16	4	

Third Semester onwards ESC of the student's primary department may also be allowed

*Also, Honours of only the same discipline, as was there in UG, can be taken

** AEC / SEC shall continue to be offered in two Groups during 3rd and 4th Semesters

Dual Degree (Category - B) Program

				DSC – Discipline Specific Course - Core					Only Minor allowed*		Only PG Courses of Second Discipline							
Semester	IDC [3-0-0]	IDC /VAC Lab [0-0-2]	VAC [3-0-0]	DC [3-0-0] in 1st year, [3-1-0] later	DE [3-0-0]	DP [0-0-2]	HSSE [3-0-0]	ESC# [3-0-0]	Minor (Only DC) [3-1-0]	SDC of Minor [0-0-3]	ADD [DCPG with Credit 3-1-0]	ADD [DEPG with Credit 3-0-0]	ADD [DPPG with Credit 0-0-3]	ADD [TU]	**AEC/SEC [3-0-0] 2nd year onwards	PR (7th - 6Cr) (8th - 10Cr)	Internship (S/X)	Graded Credits
1st & 2nd	**3**	**2**	**2**	**2**		**2**		**2**							5			42
3rd				**3**		**2**		**1**	**1**	1					**1**			**25.5**
4th				**3**		**2**		**1**	**1**	1					**1**			**25.5**
5th				**2**	**1**	**2**	**1**				**1**		**1**					**21.5**
6th				**2**	**1**	**1**	**1**		**1**		**1**		**1**					**24.5**
7th					**2**				**1**	**1**	**1**	**1**	**1**			**1**	**1**	**30**
8th									**1**	**1**	**2**	**1 (RM)**	**2**			**1**		**29.5**
9th											**1**	**1**	**1**	**1**				**28.5**
10th												**1**		**1**				**23**
Course Count	**3**	**2**	**2**	**12**	**4**	**9**	**2**	**4**	**5**	**4**	**6**	**4**	**6**	**2**	**7**	**2**	**1**	**250 credits**
Credit Count	**9**	**2**	**6**	**46**	**12**	**9**	**6**	**12**	**20**	**6**	**24**	**12**	**9**	**40**	**17**	**16**	**4**	

Third Semester onwards ESC of the student's primary department may also be allowed
*Also, Minor of only the same discipline, as is chosen for PG Degree, can be taken
** AEC / SEC shall continue to be offered in two Groups during 3rd and 4th Semesters

				DSC – Discipline Specific Course - Core					Only Minor allowed*		Only PG Courses of MBA							
Semester	IDC [3-0-0]	IDC /VAC Lab [0-0-2]	VAC [3-0-0]	DC [3-0-0] in 1st year, [3-1-0] later	DE [3-0-0]	DP [0-0-2]	HSSE [3-0-0]	ESC# [3-0-0]	Minor (Only DC) [3-1-0]	SDC of Minor [0-0-3]	ADD [At least 5 DCPG with 3-1-0]	ADD [DEPG with Credit 3-0-0]	ADD [DPPG with Credit 0-0-3/0-0-2]	ADD [Term Paper]	**AEC/SEC [3-0-0] 2nd year onwards	PR (7th - 6Cr) (8th - 10Cr)	Internship (S/X)	Graded Credits
1st & 2nd	**3**	**2**	**2**	**2**		**2**		**2**							5			42
3rd				**3**		**2**		**1**	**1**	1					**1**			**25.5**
4th				**3**		**2**		**1**	**1**	1					**1**			**25.5**
5th				**2**	**1**	**2**	**1**				**1**		**1**					**21.5**
6th				**2**	**1**	**1**	**1**		**1**		**2**		**1**					**27**
7th					**2**				**1**	**1**	**2**	**1**				**1**	**1**	**31.5**
8th									**1**	**1**	**4**	**1**				**1**		**31.5**
9th											**2**	**3**		**1**				**24**
10th												**3**		**1**				**17**
Course Count	**3**	**2**	**2**	**12**	**4**	**9**	**2**	**4**	**5**	**4**	**11**	**8**	**2**	**2**	**7**	**2**	**1**	**245.5 credits**
Credit Count	**9**	**2**	**6**	**46**	**12**	**9**	**6**	**12**	**20**	**6**	**38**	**24**	**2.5**	**16**	**17**	**16**	**4**	

Third Semester onwards ESC of the student's primary department may also be allowed
*Also, Minor of only the same discipline, as is chosen for PG Degree, can be taken
** AEC / SEC shall continue to be offered in two Groups during 3rd and 4th Semesters

Dual Degree (Category - C2) With MBA (BA)

				DSC – Discipline Specific Course - Core					Only Minor allowed*		Only PG Courses of MBA (BA)							
Semester	IDC [3-0-0]	IDC /VAC Lab [0-0-2]	VAC [3-0-0]	DC [3-0-0] in 1st year, [3-1-0] later	DE [3-0-0]	DP [0-0-2]	HSSE [3-0-0]	ESC# [3-0-0]	Minor (Only DC) [3-1-0]	SDC of Minor [0-0-3]	ADD [At least 5 DCPG with 3-1-0]	ADD [DEPG with Credit 3-0-0]	ADD [DPPG with Credit 0-0-3/0-0-2]	ADD [Term Paper]	**AEC/SEC [3-0-0] 2nd year onwards	PR (7th - 6Cr) (8th - 10Cr)	Internship (S/X)	Graded Credits
1st & 2nd	**3**	**2**	**2**	**2**		**2**		**2**							5			42
3rd				**3**		**2**		**1**	**1**	1					**1**			**25.5**
4th				**3**		**2**		**1**	**1**	1					**1**			**25.5**
5th				**2**	**1**	**2**	**1**				**1**		**1**					**21.5**
6th				**2**	**1**	**1**	**1**		**1**		**2**		**1**					**26**
7th					**2**				**1**	**1**	**2**	**1**				**1**	**1**	**32.5**
8th									**1**	**1**	**4**	**1**				**1**		**31.5**
9th											**2**	**3**		**1**				**24**
10th												**3**		**1**				**17**
Course Count	**3**	**2**	**2**	**12**	**4**	**9**	**2**	**4**	**5**	**4**	**11**	**8**	**2**	**2**	**7**	**2**	**1**	**245.5 credits**
Credit Count	**9**	**2**	**6**	**46**	**12**	**9**	**6**	**12**	**20**	**6**	**38**	**24**	**2.5**	**16**	**17**	**16**	**4**	

Third Semester onwards ESC of the student's primary department may also be allowed
*Also, Minor of only the same discipline, as is chosen for PG Degree, can be taken
** AEC / SEC shall continue to be offered in two Groups during 3rd and 4th Semesters

Dual Degree (Category - C1) With MBA

Dual Degree (Category - D) With MBA from IIM MUMBAI

				DSC – Discipline Specific Course - Core											
Semester	IDC [3-0-0]	IDC /VAC Lab [0-0-2]	VAC [3-0-0]	DC [3-0-0] in 1st year, [3-1-0] later	DE [3-0-0]	DP [0-0-2]	HSSE [3-0-0]	ESC# [3-0-0]	12 Pre-requisite courses for MBA*	**AEC/SEC [3-0-0] 2nd year onwards	PR (5th - 6Cr) (7th - 10Cr)	Internship (S/X)	Graded Credits except MBA Pre reqsts.	MBA prerequisite Course Credits	**Total credits***
1st & 2nd	**3**	**2**	**2**	**2**		**2**		**2**		5			42	0	**42**
3rd				**3**		**2**		**1**	**2**	**1**			20	7	**27**
4th				**3**		**2**		**1**	**3**	**1**			20	10	**30**
5th				**2**	**1**	**2**	**1**		**2**		**1**		22	7	**29**
6th				**2**	**1**	**1**	**1**		**3**				15	10	**25**
7th					**2**				**2**		**1**	**1**	20	8	**28**
Credits	**9**	**2**	**6**	**46**	**12**	**9**	**6**	**12**	**42**	**17**	**16**	**4**	**139**	**42**	**181 credits**

8th	**Curriculum, as prescribed at IIM Mumbai, for the MBA degree**
9th	
10th	

Third Semester onwards ESC of the student's primary department may also be allowed
*Students enrolled for this programme need to ensure that they complete all the courses of B.Tech as well as pre-requisite courses of MBA by the end of 7th semester
** AEC / SEC shall continue to be offered in two Groups during 3rd and 4th Semesters

Integrated M.Tech. Program

				DSC – Discipline Specific Course - Core					Only ^Minor or a Mix of courses (i.e. no specialization) allowed						
Semester	IDC [3-0-0]	IDC /VAC Lab [0-0-2]	VAC [3-0-0]	DC [3-0-0] in 1st year, [3-1-0] later	DE [3-0-0]	DP [0-0-2]	HSSE [3-0-0]	ESC# [3-0-0]	Minor (Only DC) [3-1-0]	SDC of Minor [0-0-3]	Vocational Training / Excursion / Field Visit [S/X]	*AEC/SEC [3-0-0] 2nd year onwards	Thesis	Internship (S/X)	Graded Credits
1st & 2nd	**3**	**2**	**2**	**2**		**2**		**2**				**5**			**42**
3rd				**3**		**2**		**1**				**1**			**20**
4th				**3**		**2**		**1**			**1**	**1**			**23**
5th				**2**	**1**	**2**	**1**		**1**	**1**					**21.5**
6th				**2**	**1**	**1**	**1**		**1**	**1**	**1**				**23.5**
7th				**3**		**2**			**1**	**1**					**19.5**
8th				**3**	**1**	**1**			**2**	**1**	**1**				**28.5**
9th													**1**	**1**	**24**
10th													**1**		**20**
Course Count	**3**	**2**	**2**	**18**	**3**	**12**	**2**	**4**	**5**	**4**	**3**	**7**	**2**	**1**	**222 credits**
Credit Count	**9**	**2**	**6**	**70**	**9**	**12**	**6**	**12**	**20**	**6**	**9**	**17**	**40**	**4**	

Third Semester onwards ESC of the student's primary department may also be allowed

* AEC / SEC shall continue to be offered in two Groups during 3rd and 4th Semesters

^Minor, if chosen, must be of a different department. No specialization means taking different courses and their respective SDC/practicals across Minors and/or Honours offered by various departments

Department of Applied Geology

Group- II

1 st Semester						
S. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC1	NMCI101	Engineering Mathematics - I	3-0-0	Theory	3
2	DSC1	NGLC103	Introduction to Palaeontology	3-0-0	Theory	3
3	DSC2	NGLC104	Palaeontology Practical	0-0-2	Practical	1
4	ESC1	NPEE101	Introduction to Petroleum Engineering	3-0-0	Theory	3
5	AEC1	NHSA103	Understanding Human Behaviour	2-1-0	Theory	3
6	SEC1	NMES101	Manufacturing Process	2-0-3	Practical	3.5
7	VAC1	NCSV101	Computer Programming	3-0-0	Theory	3
8	VAC2	NCSV102	Computer Programming Lab	0-0-2	Practical	1
						20.5
2 nd Semester						
S. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC2	NPHI101	Engineering Physics	3-0-0	Theory	3
2	IDC3	NPHI102	Engineering Physics Lab	0-0-2	Practical	1
3	IDC4	NMCI102	Engineering Mathematics - II	3-0-0	Theory	3
4	DSC3	NGLC101	Earth System and Processes	3-0-0	Theory	3
5	DSC4	NGLC102	Earth System and Processes Practical	0-0-2	Practical	1
6	ESC2	NFME102	Basic of Mineral Engineering	3-0-0	Theory	3
7	AEC2	NHSA101	Communication Skills	1-0-0	Theory	1
8	AEC3	NHSA102	Communication Skills Lab	0-0-2	Practical	1
9	SEC2	NCES101	Engineering Graphics	1-0-3	Theory	2.5
10	VAC3	NESV101	Environmental Science	3-0-0	Theory	3
						21.5

IDC – Inter-disciplinary Course; DSC – Discipline Specific Course - Core; AEC – Ability Enhancement Courses; SEC – Skill Enhancement Courses; VAC – Value Added Courses; **ESC** – Engineering Science Compulsory (**to be offered only for the students of other departments**). ESC courses mentioned herein are to be studied by your department's student.

Department of Applied Geophysics

Group- II

1 st Semester						
S. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**

1	IDC1	NMCI101	Engineering Mathematics - I	3-0-0	Theory	3
2	DSC1	NGPC101	Geoelectromagnetism	3-0-0	Theory	3
3	DSC2	NGPC102	Geoelectromagnetism Practical	0-0-2	Practical	1
4	ESC1	NPEE101	Introduction to Petroleum Engineering	3-0-0	Theory	3
5	AEC1	NHSA103	Understanding Human Behaviour	2-1-0	Theory	3
6	SEC1	NMES101	Manufacturing Process	2-0-3	Practical	3.5
7	VAC1	NCSV101	Computer Programming	3-0-0	Theory	3
8	VAC2	NCSV102	Computer Programming Lab	0-0-2	Practical	1
						20.5

2 nd Semester

S. No.	Course Component	Course Code	Course Name	L-T-P	Course Category	Credit (L*1+T*1+P*0.5)
1	IDC2	NPHI101	Engineering Physics	3-0-0	Theory	3
2	IDC3	NPHI102	Engineering Physics Lab	0-0-2	Practical	1
3	IDC4	NMCI102	Engineering Mathematics - II	3-0-0	Theory	3
4	DSC3	NGPC103	Mathematical Geophysics	3-0-0	Theory	3
5	DSC4	NGPC104	Mathematical Geophysics Practical	0-0-2	Practical	1
6	ESC2	NCSE102	Introduction to Algorithms	3-0-0	Theory	3
7	AEC2	NHSA101	Communication Skills	1-0-0	Theory	1
8	AEC3	NHSA102	Communication Skills Lab	0-0-2	Practical	1
9	SEC2	NCES101	Engineering Graphics	1-0-3	Theory	2.5
10	VAC3	NESV101	Environmental Science	3-0-0	Theory	3
						21.5

IDC – Inter-disciplinary Course; DSC – Discipline Specific Course - Core; AEC – Ability Enhancement Courses; SEC – Skill Enhancement Courses; VAC – Value Added Courses; **ESC** – Engineering Science Compulsory (**to be offered only for the students of other departments**). ESC courses mentioned herein are to be studied by your department's student.

Department of Chemical Engineering

Group- II

1 st Semester						
Sl. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC1	NMCI101	Engineering Mathematics - I	3-0-0	Theory	3
2	DSC1	NCHC101	Introduction to Chemical Engineering	3-0-0	Theory	3
3	DSC2	NCHC102	Unit Operations Lab	0-0-2	Practical	1
4	ESC1	NFME101	Introduction to Materials Science & Engineering	3-0-0	Theory	3
5	AEC1	NHSA103	Understanding Human Behaviour	2-1-0	Theory	3
6	SEC1	NMES101	Manufacturing Process	2-0-3	Practical	3.5
7	VAC1	NCSV101	Computer Programming	3-0-0	Theory	3
8	VAC2	NCSV102	Computer Programming Lab	0-0-2	Practical	1
						20.5
2 nd Semester						
Sl. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC2	NCYI101	Engineering Chemistry	3-0-0	Theory	3
2	IDC3	NCYI102	Engineering Chemistry Lab	0-0-2	Practical	1
3	IDC4	NMCI102	Engineering Mathematics - II	3-0-0	Theory	3
4	DSC3	NCHC103	Chemical Process Calculations	3-0-0	Theory	3
5	DSC4	NCHC104	Computational Tools for Chemical Engineers Lab	0-0-2	Practical	1
6	ESC2	NMEE102	Basic Mechanical Engineering	3-0-0	Theory	3
7	AEC2	NHSA101	Communication Skills	1-0-0	Theory	1
8	AEC3	NHSA102	Communication Skills Lab	0-0-2	Practical	1
9	SEC2	NCES101	Engineering Graphics	1-0-3	Theory	2.5
10	VAC3	NESV101	Environmental Science	3-0-0	Theory	3

						21.5

IDC – Inter-disciplinary Course; DSC – Discipline Specific Course - Core; AEC – Ability Enhancement Courses; SEC – Skill Enhancement Courses; VAC – Value Added Courses; **ESC** – Engineering Science Compulsory (**to be offered only for the students of other departments**). ESC courses mentioned herein are to be studied by your department's student.

Department of Computer Science and Engineering

Group- II

1 st Semester						
Sl. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC1	NMCI101	Engineering Mathematics - I	3-0-0	Theory	3
2	DSC1	NCSC101	Introduction to Unix and software Tools	3-0-0	Theory	3
3	DSC2	NCSC102	Introduction to Unix and software Tools Lab	0-0-2	Practical	1
4	ESC1	NMCE101	Statistical Methods	3-0-0	Theory	3
5	AEC1	NHSA103	Understanding Human Behaviour	2-1-0	Theory	3
6	SEC1	NMES101	Manufacturing Process	2-0-3	Practical	3.5
7	VAC1	NCSV101	Computer Programming	3-0-0	Theory	3
8	VAC2	NCSV102	Computer Programming Lab	0-0-2	Practical	1
						20.5
2 nd Semester						
Sl. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC2	NPHI101	Engineering Physics	3-0-0	Theory	3
2	IDC3	NPHI102	Engineering Physics Lab	0-0-2	Practical	1
3	IDC4	NMCI102	Engineering Mathematics - II	3-0-0	Theory	3
4	DSC3	NCSC103	Data Structures	3-0-0	Theory	3
5	DSC4	NCSC104	Data Structures Lab	0-0-2	Practical	1

6	ESC2	NECE102	Digital Electronics	3-0-0	Theory	3
7	AEC2	NHSA101	Communication Skills	1-0-0	Theory	1
8	AEC3	NHSA102	Communication Skills Lab	0-0-2	Practical	1
9	SEC2	NCES101	Engineering Graphics	1-0-3	Theory	2.5
10	VAC3	NESV101	Environmental Science	3-0-0	Theory	3
						21.5

IDC – Inter-disciplinary Course; DSC – Discipline Specific Course - Core; AEC – Ability Enhancement Courses; SEC – Skill Enhancement Courses; VAC – Value Added Courses; **ESC** – Engineering Science Compulsory (**to be offered only for the students of other departments**).ESC courses mentioned herein are to be studied by your department's student.

Department of Civil Engineering

Group- I

1 st Semester						
Sl. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC1	NMCI101	Engineering Mathematics - I	3-0-0	Theory	3
2	IDC2	NPHI101	Engineering Physics	3-0-0	Theory	3
3	IDC3	NPHI102	Engineering Physics Lab	0-0-2	Practical	1
4	DSC1	NCEC101	Building Materials and Building Construction	3-0-0	Theory	3
5	DSC2	NCEC102	Material Testing Laboratory	0-0-2	Practical	1
6	ESC1	NMEE101	Mechanics for Engineers	3-0-0	Theory	3
7	AEC1	NHSA101	Communication Skills	1-0-0	Theory	1
8	AEC2	NHSA102	Communication Skills Lab	0-0-2	Practical	1
9	SEC1	NCES101	Engineering Graphics	1-0-3	Theory	2.5
10	VAC1	NESV101	Environmental Science	3-0-0	Theory	3
						21.5
2 nd Semester						

S. No.	Course Component	Course Code	Course Name	L-T-P	Course Category	Credit (L*1+T*1+P*0.5)
1	IDC4	NMCI102	Engineering Mathematics - II	3-0-0	Theory	3
2	DSC3	NCEC103	Surveying	3-0-0	Theory	3
3	DSC4	NCEC104	Surveying Laboratory	0-0-2	Practical	1
4	ESC2	NESE101	Basics of Environmental Engineering	3-0-0	Theory	3
5	AEC3	NHSA103	Understanding Human Behaviour	2-1-0	Theory	3
6	SEC2	NMES101	Manufacturing Process	2-0-3	Theory	3.5
7	VAC2	NCSV101	Computer Programming	3-0-0	Theory	3
8	VAC3	NCSV102	Computer Programming Lab	0-0-2	Practical	1
						20.5

IDC – Inter-disciplinary Course; DSC – Discipline Specific Course - Core; AEC – Ability Enhancement Courses; SEC – Skill Enhancement Courses; VAC – Value Added Courses; **ESC** – Engineering Science Compulsory (**to be offered only for the students of other departments**). ESC courses mentioned herein are to be studied by your department's student.

Department of Electronics and Communication Engineering

Group- II

1 st Semester						
Sl. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC1	NMCI101	Engineering Mathematics - I	3-0-0	Theory	3
2	DSC1	NECC101	Introduction to Electronics Engineering	3-0-0	Theory	3
3	DSC2	NECC102	Introduction to Electronics Engineering Lab	0-0-2	Practical	1
4	ESC1	NEEE101	Electrical Devices and Circuits	3-0-0	Theory	3
5	AEC1	NHSA103	Understanding Human Behaviour	2-1-0	Theory	3
6	SEC1	NMES101	Manufacturing Process	2-0-3	Practical	3.5

7	VAC1	NCSV101	Computer Programming	3-0-0	Theory	3
8	VAC2	NCSV102	Computer Programming Lab	0-0-2	Practical	1
						20.5
2 nd Semester						
Sl. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC2	NPHI101	Engineering Physics	3-0-0	Theory	3
2	IDC3	NPHI102	Engineering Physics Lab	0-0-2	Practical	1
3	IDC4	NMCI102	Engineering Mathematics - II	3-0-0	Theory	3
4	DSC3	NECC103	Digital Circuits and System Design	3-0-0	Theory	3
5	DSC4	NECC104	Digital System Design Lab	0-0-2	Practical	1
6	ESC2	NCSE102	Introduction to Algorithms	3-0-0	Theory	3
7	AEC2	NHSA101	Communication Skills	1-0-0	Theory	1
8	AEC3	NHSA102	Communication Skills Lab	0-0-2	Practical	1
9	SEC2	NCES101	Engineering Graphics	1-0-3	Theory	2.5
10	VAC3	NESV101	Environmental Science	3-0-0	Theory	3
						21.5

IDC – Inter-disciplinary Course; DSC – Discipline Specific Course - Core; AEC – Ability Enhancement Courses; SEC – Skill Enhancement Courses; VAC – Value Added Courses; **ESC** – Engineering Science Compulsory (**to be offered only for the students of other departments**). ESC courses mentioned herein are to be studied by your department's student.

Department of Electrical Engineering

Group- I

1 st Semester						
Sl. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC1	NMCI101	Engineering Mathematics - I	3-0-0	Theory	3
2	IDC2	NPHI101	Engineering Physics	3-0-0	Theory	3
3	IDC3	NPHI102	Engineering Physics Lab	0-0-2	Practical	1

4	DSC1	NEEC101	Basics of Electrical Engineering - I	3-0-0	Theory	3
5	DSC2	NEEC102	Basics of Electrical Engineering - I Lab	0-0-2	Practical	1
6	ESC1	NECE101	Basics of Electronics Engineering	3-0-0	Theory	3
7	AEC1	NHSA101	Communication Skills	1-0-0	Theory	1
8	AEC2	NHSA102	Communication Skills Lab	0-0-2	Practical	1
9	SEC1	NCES101	Engineering Graphics	1-0-3	Theory	2.5
10	VAC1	NESV101	Environmental Science	3-0-0	Theory	3
						21.5
2 nd Semester						
S. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC4	NMCI102	Engineering Mathematics - II	3-0-0	Theory	3
2	DSC3	NEEC103	Basics of Electrical Engineering - II	3-0-0	Theory	3
3	DSC4	NEEC104	Basics of Electrical Engineering - II Lab	0-0-2	Practical	1
4	ESC2	NCSE102	Introduction to Algorithms	3-0-0	Theory	3
5	AEC3	NHSA103	Understanding Human Behaviour	2-1-0	Theory	3
6	SEC2	NMES101	Manufacturing Process	2-0-3	Theory	3.5
7	VAC2	NCSV101	Computer Programming	3-0-0	Theory	3
8	VAC3	NCSV102	Computer Programming Lab	0-0-2	Practical	1
						20.5

IDC – Inter-disciplinary Course; DSC – Discipline Specific Course - Core; AEC – Ability Enhancement Courses; SEC – Skill Enhancement Courses; VAC – Value Added Courses; **ESC** – Engineering Science Compulsory (**to be offered only for the students of other departments**). ESC courses mentioned herein are to be studied by your department's student.

Department of Engineering Physics

Group- II

1 st Semester						
S. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC1	NMCI101	Engineering Mathematics - I	3-0-0	Theory	3
2	DSC1	NPHC101	Wave and Acoustics	3-0-0	Theory	3
3	DSC2	NPHC102	Wave and Acoustics Lab	0-0-2	Practical	1
4	ESC1	NCSE101	Fundamental of Data Structures	3-0-0	Theory	3
5	AEC1	NHSA103	Understanding Human Behaviour	2-1-0	Theory	3
6	SEC1	NMES101	Manufacturing Process	2-0-3	Practical	3.5
7	VAC1	NCSV101	Computer Programming	3-0-0	Theory	3
8	VAC2	NCSV102	Computer Programming Lab	0-0-2	Practical	1
						20.5
2 nd Semester						
S. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC2	NCYI101	Engineering Chemistry	3-0-0	Theory	3
2	IDC3	NCYI102	Engineering Chemistry Lab	0-0-2	Practical	1
3	IDC4	NMCI102	Engineering Mathematics - II	3-0-0	Theory	3
4	DSC3	NPHC103	Applied Optics	3-0-0	Theory	3
5	DSC4	NPHC104	Optics Lab	0-0-2	Practical	1
6	ESC2	NMCE102	Numerical Methods	3-0-0	Theory	3
7	AEC2	NHSA101	Communication Skills	1-0-0	Theory	1
8	AEC3	NHSA102	Communication Skills Lab	0-0-2	Practical	1
9	SEC2	NCES101	Engineering Graphics	1-0-3	Theory	2.5

10	VAC3	NESV101	Environmental Science	3-0-0	Theory	3
						21.5

IDC – Inter-disciplinary Course; DSC – Discipline Specific Course - Core; AEC – Ability Enhancement Courses; SEC – Skill Enhancement Courses; VAC – Value Added Courses; **ESC** – Engineering Science Compulsory (**to be offered only for the students of other departments**). ESC courses mentioned herein are to be studied by your department's student.

Department of Environmental Science and Engineering

Group- I

1 st Semester						
Sl. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC1	NMCI101	Engineering Mathematics - I	3-0-0	Theory	3
2	IDC2	NCYI101	Engineering Chemistry	3-0-0	Theory	3
3	IDC3	NCYI102	Engineering Chemistry Lab	0-0-2	Practical	1
4	DSC1	NESC101	Drinking Water Supply and Treatment	3-0-0	Theory	3
5	DSC2	NESC102	Water Pollution Practical	0-0-2	Practical	1
6	ESC1	NCHE101	Unit operations and Unit Processes	3-0-0	Theory	3
7	AEC1	NHSA101	Communication Skills	1-0-0	Theory	1
8	AEC2	NHSA102	Communication Skills Lab	0-0-2	Practical	1
9	SEC1	NCES101	Engineering Graphics	1-0-3	Theory	2.5
10	VAC1	NESV101	Environmental Science	3-0-0	Theory	3
						21.5
2 nd Semester						
S. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC4	NMCI102	Engineering Mathematics - II	3-0-0	Theory	3
2	DSC3	NESC103	Air Pollution	3-0-0	Theory	3
3	DSC4	NESC104	Air and Noise Pollution Practical	0-0-2	Practical	1

4	ESC2	NMNE102	Introduction to Mining, Energy and Climate Change	3-0-0	Theory	3
5	AEC3	NHSA103	Understanding Human Behaviour	2-1-0	Theory	3
6	SEC2	NMES101	Manufacturing Process	2-0-3	Theory	3.5
7	VAC2	NCSV101	Computer Programming	3-0-0	Theory	3
8	VAC3	NCSV102	Computer Programming Lab	0-0-2	Practical	1
						20.5

IDC – Inter-disciplinary Course; DSC – Discipline Specific Course - Core; AEC – Ability Enhancement Courses; SEC – Skill Enhancement Courses; VAC – Value Added Courses; **ESC** – Engineering Science Compulsory (**to be offered only for the students of other departments**). ESC courses mentioned herein are to be studied by your department's student.

Department of Fuel Minerals and Metallurgical Engineering

Group- II

1 st Semester						
S. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC1	NMCI101	Engineering Mathematics - I	3-0-0	Theory	3
2	DSC1	NFMC101	Introduction to Metallurgical Engineering	3-0-0	Theory	3
3	DSC2	NFMC102	Introduction to Metallurgical Engineering Lab	0-0-2	Practical	1
4	ESC1	NMNE101	Mine to Mill Operations	3-0-0	Theory	3
5	AEC1	NHSA103	Understanding Human Behaviour	2-1-0	Theory	3
6	SEC1	NMES101	Manufacturing Process	2-0-3	Practical	3.5
7	VAC1	NCSV101	Computer Programming	3-0-0	Theory	3
8	VAC2	NCSV102	Computer Programming Lab	0-0-2	Practical	1
						20.5
2 nd Semester						

S. No.	Course Component	Course Code	Course Name	L-T-P	Course Category	Credit (L*1+T*1+P*0.5)
1	IDC2	NCYI101	Engineering Chemistry	3-0-0	Theory	3
2	IDC3	NCYI102	Engineering Chemistry Lab	0-0-2	Practical	1
3	IDC4	NMCI102	Engineering Mathematics - II	3-0-0	Theory	3
4	DSC3	NFMC103	Introduction to Mineral Engineering	3-0-0	Theory	3
5	DSC4	NFMC104	Introduction to Mineral Engineering Lab	0-0-2	Practical	1
6	ESC2	NMEE102	Basic Mechanical Engineering	3-0-0	Theory	3
7	AEC2	NHSA101	Communication Skills	1-0-0	Theory	1
8	AEC3	NHSA102	Communication Skills Lab	0-0-2	Practical	1
9	SEC2	NCES101	Engineering Graphics	1-0-3	Theory	2.5
10	VAC3	NESV101	Environmental Science	3-0-0	Theory	3
						21.5

IDC – Inter-disciplinary Course; DSC – Discipline Specific Course - Core; AEC – Ability Enhancement Courses; SEC – Skill Enhancement Courses; VAC – Value Added Courses; **ESC** – Engineering Science Compulsory (**to be offered only for the students of other departments**).
ESC courses mentioned herein are to be studied by your department's student.

Department of Mathematics and Computing

Group- II

1 st Semester						
Sl. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC1	NMCI101	Engineering Mathematics - I	3-0-0	Theory	3
2	DSC1	NMCC101	Computer Organization and Architecture	3-0-0	Theory	3
3	DSC2	NMCC102	Computer Organization and Architecture Lab	0-0-2	Practical	1

4	ESC1	NECE101	Basics of Electronics Engineering	3-0-0	Theory	3
5	AEC1	NHSA103	Understanding Human Behaviour	2-1-0	Theory	3
6	SEC1	NMES101	Manufacturing Process	2-0-3	Practical	3.5
7	VAC1	NCSV101	Computer Programming	3-0-0	Theory	3
8	VAC2	NCSV102	Computer Programming Lab	0-0-2	Practical	1
						20.5
2 nd Semester						
Sl . No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC2	NPHI101	Engineering Physics	3-0-0	Theory	3
2	IDC3	NPHI102	Engineering Physics Lab	0-0-2	Practical	1
3	IDC4	NMCI102	Engineering Mathematics - II	3-0-0	Theory	3
4	DSC3	NCSC103	Data Structures	3-0-0	Theory	3
5	DSC4	NCSC104	Data Structures Lab	0-0-2	Practical	1
6	ESC2	NECE102	Digital Electronics	3-0-0	Theory	3
7	AEC2	NHSA101	Communication Skills	1-0-0	Theory	1
8	AEC3	NHSA102	Communication Skills Lab	0-0-2	Practical	1
9	SEC2	NCES101	Engineering Graphics	1-0-3	Theory	2.5
10	VAC3	NESV101	Environmental Science	3-0-0	Theory	3
						21.5

IDC – Inter-disciplinary Course; DSC – Discipline Specific Course - Core; AEC – Ability Enhancement Courses; SEC – Skill Enhancement Courses; VAC – Value Added Courses; **ESC** –

Engineering Science Compulsory (**to be offered only for the students of other departments**). ESC courses mentioned herein are to be studied by your department's student.

Department of Mechanical Engineering

Group- I

1 st Semester						
Sl. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC1	NMCI101	Engineering Mathematics - I	3-0-0	Theory	3
2	IDC2	NPHI101	Engineering Physics	3-0-0	Theory	3
3	IDC3	NPHI102	Engineering Physics Lab	0-0-2	Practical	1
4	DSC1	NMEC101	Engineering Mechanics	3-0-0	Theory	3
5	DSC2	NMEC102	Engineering Mechanic Lab	0-0-2	Practical	1
6	ESC1	NEEE101	Electrical Devices and Circuits	3-0-0	Theory	3
7	AEC1	NHSA101	Communication Skills	1-0-0	Theory	1
8	AEC2	NHSA102	Communication Skills Lab	0-0-2	Practical	1
9	SEC1	NCES101	Engineering Graphics	1-0-3	Theory	2.5
10	VAC1	NESV101	Environmental Science	3-0-0	Theory	3
						21.5
2 nd Semester						
S. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC4	NMCI102	Engineering Mathematics - II	3-0-0	Theory	3
2	DSC3	NMEC103	Thermodynamics	3-0-0	Theory	3
3	DSC4	NMEC104	Thermodynamics Lab	0-0-2	Practical	1
4	ESC2	NECE102	Digital Electronics	3-0-0	Theory	3
5	AEC3	NHSA103	Understanding Human Behaviour	2-1-0	Theory	3
6	SEC2	NMES101	Manufacturing Process	2-0-3	Theory	3.5
7	VAC2	NCSV101	Computer Programming	3-0-0	Theory	3
8	VAC3	NCSV102	Computer Programming Lab	0-0-2	Practical	1
						20.5

IDC – Inter-disciplinary Course; DSC – Discipline Specific Course - Core; AEC – Ability Enhancement Courses; SEC – Skill Enhancement Courses; VAC – Value Added Courses; **ESC** –

Engineering Science Compulsory (**to be offered only for the students of other departments**). ESC courses mentioned herein are to be studied by your department's student.

Department of Mining Machinery Engineering

Group- I

1 st Semester						
Sl. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+ P*0.5)**
1	IDC1	NMCI101	Engineering Mathematics - I	3-0-0	Theory	3
2	IDC2	NPHI101	Engineering Physics	3-0-0	Theory	3
3	IDC3	NPHI102	Engineering Physics Lab	0-0-2	Practical	1
4	DSC1	NMEC101	Engineering Mechanics	3-0-0	Theory	3
5	DSC2	NMEC102	Engineering Mechanic Lab	0-0-2	Practical	1
6	ESC1	NEEE101	Electrical Devices and Circuits	3-0-0	Theory	3
7	AEC1	NHSA101	Communication Skills	1-0-0	Theory	1
8	AEC2	NHSA102	Communication Skills Lab	0-0-2	Practical	1
9	SEC1	NCES101	Engineering Graphics	1-0-3	Theory	2.5
10	VAC1	NESV101	Environmental Science	3-0-0	Theory	3
						21.5
2 nd Semester						
S. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+ P*0.5)**
1	IDC4	NMCI102	Engineering Mathematics - II	3-0-0	Theory	3
2	DSC3	NMEC103	Thermodynamics	3-0-0	Theory	3
3	DSC4	NMEC104	Thermodynamics Lab	0-0-2	Practical	1
4	ESC2	NECE102	Digital Electronics	3-0-0	Theory	3
5	AEC3	NHSA103	Understanding Human Behaviour	2-1-0	Theory	3
6	SEC2	NMES101	Manufacturing Process	2-0-3	Theory	3.5
7	VAC2	NCSV101	Computer Programming	3-0-0	Theory	3

8	VAC3	NCSV102	Computer Programming Lab	0-0-2	Practical	1
						20.5

IDC – Inter-disciplinary Course; DSC – Discipline Specific Course - Core; AEC – Ability Enhancement Courses; SEC – Skill Enhancement Courses; VAC – Value Added Courses; **ESC** – Engineering Science Compulsory (**to be offered only for the students of other departments**). ESC courses mentioned herein are to be studied by your department's student.

Department of Mining Engineering

Group- I

1 st Semester						
Sl. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC1	NMCI101	Engineering Mathematics - I	3-0-0	Theory	3
2	IDC2	NPHI101	Engineering Physics	3-0-0	Theory	3
3	IDC3	NPHI102	Engineering Physics Lab	0-0-2	Practical	1
4	DSC1	NMNC101	Mine Economics	3-0-0	Theory	3
5	DSC2	NMNC102	Mining Technology Lab	0-0-2	Practical	1
6	ESC1	NMEE101	Mechanics For Engineers	3-0-0	Theory	3
7	AEC1	NHSA101	Communication Skills	1-0-0	Theory	1
8	AEC2	NHSA102	Communication Skills Lab	0-0-2	Practical	1
9	SEC1	NCES101	Engineering Graphics	1-0-3	Theory	2.5
10	VAC1	NESV101	Environmental Science	3-0-0	Theory	3
						21.5
2 nd Semester						
S. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC4	NMCI102	Engineering Mathematics - II	3-0-0	Theory	3
2	DSC3	NMNC103	Elements of Mining	3-0-0	Theory	3
3	DSC4	NMNC104	Mine Model Laboratory	0-0-2	Practical	1
4	ESC2	NECE102	Digital Electronics	3-0-0	Theory	3

5	AEC3	NHSA103	Understanding Human Behaviour	2-1-0	Theory	3
6	SEC2	NMES101	Manufacturing Process	2-0-3	Theory	3.5
7	VAC2	NCSV101	Computer Programming	3-0-0	Theory	3
8	VAC3	NCSV102	Computer Programming Lab	0-0-2	Practical	1
						20.5

IDC – Inter-disciplinary Course; DSC – Discipline Specific Course - Core; AEC – Ability Enhancement Courses; SEC – Skill Enhancement Courses; VAC – Value Added Courses; **ESC** – Engineering Science Compulsory (**to be offered only for the students of other departments**). ESC courses mentioned herein are to be studied by your department's student.

Department of Petroleum Engineering

Group- II

1 st Semester						
S. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T*1+P*0.5)**
1	IDC1	NMCI101	Engineering Mathematics - I	3-0-0	Theory	3
2	DSC1	NPEC101	Elements of Reservoir Engineering	3-0-0	Theory	3
3	DSC2	NPEC102	Reservoir Engineering Lab	0-0-2	Practical	1
4	ESC1	NGLE101	Introduction to Earth Science	3-0-0	Theory	3
5	AEC1	NHSA103	Understanding Human Behaviour	2-1-0	Theory	3
6	SEC1	NMES101	Manufacturing Process	2-0-3	Practical	3.5
7	VAC1	NCSV101	Computer Programming	3-0-0	Theory	3
8	VAC2	NCSV102	Computer Programming Lab	0-0-2	Practical	1
						20.5
2 nd Semester						
S. No.	**Course Component**	**Course Code**	**Course Name**	**L-T-P**	**Course Category**	**Credit (L*1+T**

						***1+P*0.5)**
1	IDC2	NCYI101	Engineering Chemistry	3-0-0	Theory	3
2	IDC3	NCYI102	Engineering Chemistry Lab	0-0-2	Practical	1
3	IDC4	NMCI102	Engineering Mathematics - II	3-0-0	Theory	3
4	DSC3	NPEC103	Petroleum Engineering Thermodynamics and Transport Phenomena	3-0-0	Theory	3
5	DSC4	NPEC104	Process Engineering Lab	0-0-2	Practical	1
6	ESC2	NGPE102	Introduction to Geophysics	3-0-0	Theory	3
7	AEC2	NHSA101	Communication Skills	1-0-0	Theory	1
8	AEC3	NHSA102	Communication Skills Lab	0-0-2	Practical	1
9	SEC2	NCES101	Engineering Graphics	1-0-3	Theory	2.5
10	VAC3	NESV101	Environmental Science	3-0-0	Theory	3
						21.5

IDC – Inter-disciplinary Course; DSC – Discipline Specific Course - Core; AEC – Ability Enhancement Courses; SEC – Skill Enhancement Courses; VAC – Value Added Courses; **ESC** – Engineering Science Compulsory (**to be offered only for the students of other departments**). ESC courses mentioned herein are to be studied by your department's student.

New PG Program Templates Notification

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/840 23.10.2024

NOTIFICATION

NEW POSTGRADUATE PROGRAM TEMPLATES (AS NEP 2020)

The new PG program templates, as applicable from the batch admitted in MS 2024-25, are enclosed for the reference of all.

Kindly note that in addition to the given credits, some non-credit units are also required to be necessarily earned to successfully complete the program {notification dated 18.09.2024 enclosed for reference. Office of Dean (Students' Welfare) will provide the details in this regard in due course/shortly}.

For the PG first year, the department wise list of courses is also enclosed for reference.

23/10/2024

Dean (Academic)

Copy to: Director / Dy. Director
All Deans / Assoc. Deans / HoDs
Registrar
DR (Acad) / AR (UG) / AR (PG) / AR (SW)
All PG Students

UPDATED PG PROGRAM TEMPLATES AS PER NEP 2020 (EFFECTIVE FROM THE BATCH ADMITTED IN MS 2024-25)

M.Tech. Program

Semester	DC [3-1-0]	DE [3-0-0]	RM [3-0-0]	DP [0-0-3]	Thesis	Credits
1st	**3**	**2**		**3**		**22.5**
2nd	**3**	**1**	**1**	**3**		**22.5**
3rd					**1**	**20**
4th					**1**	**20**
Course Count	**6**	**3**	**1**	**6**	**2**	
Credit Count	**24**	**9**	**3**	**9**	**40**	**Total 85 Credits**

M.Sc.Tech. Program

Semester	DC [1st Sem: 3 DC of 3-1-0 and 2 DC of 3-0-0; 2nd & 4th sem all DC of 3-00; 3rd Sem: 2 DC of 3-1-0 and 3 DC of 3-0-0; 5th sem: 1 DC of 3-1-0 and 1 DC of 3-0-0)	DE [3-0-0]	RM [3-0-0]	DP [0-0-2]	Thesis	Vocational Training / Excursion / Field Visit [S/X]	Internship (Non-Credit Unit)	Credits
1st	**5**			**3**				**21**
2nd	**5**			**3**		**1**		**21**
3rd	**5**			**3**				**20**
4th	**5**			**2**		**1**		**20**
5th	**2**	**2**	**1**				**1**	**21**

6th					**1**			**20**
Course Count	**22**	**2**	**1**	**11**	**1**	**2**	**1**	
Credit Count	**72**	**6**	**3**	**11**	**20**	**6**	**5**	**Total 123 Credits**

M.Sc. Program

Semester	DC [Atleast three DCs should be of 3-1-0 in 1st semester and two each in other semesters]	DE [3-0-0]	RM [3-0-0]	DP [0-0-3]	Thesis	Credits
1st	**5**			**2**		**21**
2nd	**4**	**1**		**2**		**20**
3rd	**2**	**2**	**1**	**2**		**20**
4th					**1**	**20**
Course Count	**11**	**3**	**1**	**6**	**1**	
Credit Count	**40**	**9**	**3**	**9**	**20**	**Total 81 Credits**

MA Program

Semester	DC [Atleast three DCs should be of 3-1-0 in 1st semester and two in other semesters]	DE [3-0-0]	RM [3-0-0]	DP [0-0-3/ 0-0-2]	Thesis	Credits
1st	**4**		**1**	**2**		**20.5**
2nd	**4**	**1**		**1**		**19.5**
3rd	**3**	**2**		**2**		**21**
4th					**1**	**20**
Course Count	**11**	**3**	**1**	**5**	**1**	
Credit Count	**42**	**9**	**3**	**7**	**20**	**Total 81 Credits**

MBA Program

Semester	DC [Atleast three DCs should be of 3-1-0 in 1st semester and two in 2nd sem]	DE [3-0-0]	DP [0-0-3] in 1st and [0-0-2) in 2nd sem	Term Paper (S/X)	Credits
1st	**5**	**0**	**1**		**19.5**
2nd	**6**	**0**	**1**		**21**
3rd		**4**		**1**	**20**
4th		**4**		**1**	**20**
Course Count	**11**	**8**	**2**	**2**	
Credit Count	**38**	**24**	**2.5**	**16**	**Total 80.5 Credits**

MBA (BA) Program

Semester	DC [Atleast four DCs should be of 3-1-0 in 1st semester and one in 2nd sem]	DE [3-0-0]	DP [0-0-3] in 1st and [0-0-2) in 2nd sem	Term Paper (S/X)	Credits
1st	**5**		**1**		**20.5**
2nd	**6**		**1**		**20**
3rd		**4**		**1**	**20**
4th		**4**		**1**	**20**
Course Count	**11**	**8**	**2**	**2**	
Credit Count	**38**	**24**	**2.5**	**16**	**Total 80.5 Credits**

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/ 825 18th September, 2024

NOTIFICATION

REVISION IN NON CREDIT UNITS

The approved revision in Non Credit Units (in NEP regime), as recommended by the DSW Office, is enclosed for the information of all.

18/09/2024
Dean (Academic)

Copy to:

1. Director/Deputy Director
2. Registrar
3. All Deans/ Associate Deans/ FIC (Automation)
4. All HODs
5. DR (Acad)/ AR (PG)/ AR(UG)/ AR(SW)/ SPO

Subject: Proposal for Non-credit Units to be implemented w.e.f. MS 2024-25

The following proposed is placed before the Senate to give recommendations for the implementation of changes in line with NEP 2020 on the system of Non-Credit Units to be implemented from MS 2024-25. The following are the details:

Non-Credit Unit & Minimum Units required for each program:

Sl.no.	Program	Discipline (2 units per semester)	NCC/NSS/NSO/ CCS/Yoga (2 units per semester for 1st two years) Sl. No. 1-5 to be assessed during even semesters(2nd & 4th)only & Sl.no. 6-12 to be assessed during odd semester (1st & 3rd) only Under CCS 101 & CCS 102	Community Outreach/ Community Services/ Sports/Student Club Activities/ Cultural Activities/ NVCTI Activities (2 units per semester for 1st two years) Sl. No. 1-5 to be assessed during even semesters(2nd & 4th) only & Sl.no. 6-12 to be assessed during odd semester (1st & 3rd) only	Other CCA or recognition in Inter IIT / Inter University / State / National / International events (during entire period) *	Maxim m no credit uni ts that can b earne
A	B	C	D	E	F	G
1	B.Tech.	16	4	4	4	28
2		16	4	4	4	28

	B.Tech. with Minor					
3	**Double Major**	20	4	4	4	32
4	**Dual Degree (Category A/B/C)**	20	4	4	4	32
5	**Int. M.Tech.**	20	4	4	4	32
6	**M.Tech.**	8	4	4	4	20
	M.Sc. Tech.	12	4	4	4	24
8	**M.Sc.**	8	4	4	4	20
9	**MBA**	8	4	4	4	20
10	**MBA (BA)**	8	4	4	4	20
11	**MA**	8	4	4	4	20
12	**Ph.D. (Full Time)**	2 per sem.	4	4	4	12 + 2 per sem.

** For participation in Inter IIT / Inter University / State / National / International events, **2 units** will be credited.*

*** For each indiscipline negative 1 unit minimum & maximum up to 4 unit depending upon severity (Discipline grading may be decided by the Office of DSW) will be awarded*

**** Min discipline unit to be decided e.g. 50 % of the total discipline units if 16 then at least 8 and so on.*

#in the event, if any one shortfalls of minimum non-credit units, a make-up test may be conducted under CCS or special programme at the end of courses if required

M.Sc.Tech (Applied Geology)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Mineralogy	NGLC501
DC 2	3 1 0	4	Applied Geochemistry	NGLC502
DC 3	3 1 0	4	Solid Earth Geophysics	NGPC514
DC 4	3 0 0	3	Methods of Structural Geology	NGLC503
DC 5	3 0 0	3	Applied Sedimentology	NGLC504
DP 1	0 0 2	1	Mineralogy and Geochemistry Practical	NGLC505
DP 2	0 0 2	1	Methods of Structural Geology Practical	NGLC506
DP 3	0 0 2	1	Sedimentology Practical	NGLC507
Total Credits 21				

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 6	3 0 0	3	Igneous Petrology	NGLC521
DC 7	3 0 0	3	Metamorphic Petrology	NGLC522
DC 8	3 0 0	3	Petroleum Geology	NGLC520
DC 9	3 0 0	3	Programming in MATLAB	NGLC523
DC 10	3 0 0	3	Coal Geology	NGLC515
DP 4	0 0 2	1	Igneous Petrology Practical	NGLC524
DP 5	0 0 2	1	Metamorphic Petrology Practical	NGLC525
DP 6	0 0 2	1	Coal Geology and Petroleum Geology Practical	NGLC526
Vocational Training / Field Visit / Excursion etc.	S/ X	2.5	Sedimentary Field Training	NGLC527
Total Credits 20.5				

Department of Applied

M.Sc.Tech (Applied Geophysics)

Semester I

Course	L-T-	Credits	Name of the Course offered	Course Code
DC	3 1 0	4	Geohpysical	NGPC5
DC	3 00	3	Mathematical Functional	NGPC5
DC	3 1 0	4	Solid Earth	NGPC5
DC	3 00	3	Physical and Structural	NGLC2
DC	3 1 0	4	Remote Sensing	NGPC5
DP	0 02	1	Remote Sensing Principles	NGPC5
DP	0 02	1	Mathematical Functional Analysis	NGPC5
DP	0 02	1	Geohpysical Methods	NGPC5
Total Credits				

Semester II

Course	L-T-	Credits	Name of the Course to be offered	Course Code
DC	3 00	3	Gravity	NGPC5
DC	3 00	3	Earthquake	NGPC5
DC	3 00	3	Geoelectrical	NGPC5
DC	3 00	3	Seismic Data	NGPC5
DC	3 00	3	Economic Geology & Indian Mineral	NGPC5
DP	0 02	1	Seismic Data Acquisition	NGPC5
DP	0 02	1	Geoelectrical Method	NGPC5
DP	0 02	1	Earthquake Seismology	NGPC5
Vocational Field Visit / etc.	S/	2.	Vocational Training / Field Visit /	NGPC5
Total Credits 20.5				

M.Tech (Applied Geophysics-Earthquake Science and Engineering)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Seismology	NGPC501
DC 2	3 1 0	4	Geotechnical Modelling	NGPC502
DC 3	3 1 0	4	Computational Seismology	NGPC503
DE 1	3 0 0	3	Hydrology	NGPD506
DE 2	3 0 0	3	Seismic Hazard Zonation	NGPD505
DP 1	0 0 3	1.5	Geotechnical Modelling Practical	NGPC504
DP 2	0 0 3	1.5	Seismology Practical	NGPC505
DP 3	0 0 3	1.5	Computational Seismology Practical	NGPC506
To			tal Credits 22.5	

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	Remote Sensing: Principles and Data Acquisition System	NGPC507
DC 5	3 1 0	4	Advanced Numerical Methods	NGPC508
DC 6	3 1 0	4	Computational Seismology	NGPC503
DE 3	3 0 0	3		
RM	3 0 0	3	Research Methodology	NGPC595
DP 4	0 0 3	1.5	Remote Sensing: Principles and Data Acquisition System Pra	NGPC510
DP 5	0 0 3	1.5	Advanced Numerical Methods Practical	NGPC511
DP 6	0 0 3	1.5	Computational Seismology Practical	NGPC506
Total Credits 22.5				

Department of Chemical Engineering

M.Tech (Chemical Engg.)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Advanced Transport Phenomena	NCHC501
DC 2	3 1 0	4	Advanced Chemical Engineering Thermodyna m	NCHC502
DC 3	3 1 0	4	Computational Techniques in Chemical Engine	eNCHC503
DE 1	3 0 0	3		
DE 2	3 0 0	3		
DP 1	0 0 3	1.5	Computational Techniques Lab	NCHC504
DP 2	0 0 3	1.5	Advanced Process Simulation Lab	NCHC505
DP 3	0 0 3	1.5	Instrumental Methods of Analysis	NCHC506
Total Credits 22.5				

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	Advanced Chemical Reaction Engineering	NCHC507
DC 5	3 1 0	4	Advanced Mass transfer	NCHC508
DC 6	3 1 0	4	Advanced Process Control	NCHC509
DE 3	3 0 0	3		
RM	3 0 0	3		
DP 4	0 0 3	1.5	Advanced Processes Lab	NCHC510
DP 5	0 0 3	1.5	Advanced Chemical Engineering Lab	NCHC511
DP 6	0 0 3	1.5	Term Paper and Presentation	NCHC512
Total Credits 25.5				

Department of Chemistry and Chemical Biology

M.Sc. (Chemistry)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Physical Organic Chemistry	NCYC511
DC 2	3 1 0	4	Quantum Chemistry	NCYC510
DC 3	3 1 0	4	Group Theory	NCYC512
DC 4	3 0 0	3	Main Group Chemistry	NCYC514
DC 5	3 0 0	3	Application of Spectroscopic Methods	NCYC513
DP 1	0 0 3	1.5	Organic Chemistry Lab – I	NCYC516
DP 2	0 0 3	1.5	Inorganic Chemistry Lab	NCYC515
Total Credits 21				

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 6	3 1 0	4	Transition Metal Chemistry	NCYC519
DC 7	3 1 0	4	Molecular Spectroscopy	NCYC520
DC 8	3 0 0	3	Methods in Organic Synthesis	NCYC518
DC 9	3 0 0	3	Kinetics and Thermodynamics	NCYC517
DE 1	3 0 0	3		
DP 3	0 0 3	1.5	Physical Chemistry lab- I	NCYC521
DP 4	0 0 3	1.5	Analytical Chemistry lab	NCYC522
Total Credits 20				

M.Tech (Pharmaceutical Science and Engineering)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Basic of Pharmacology	NCYC501
DC 2	3 1 0	4	Unit Operations for Pharmaceutics	NCHC525
DC 3	3 1 0	4	Formulation & Drug Delivery Technology	NCYC502
DE 1	3 0 0	3		
DE 2	3 0 0	3		
DP 1	0 0 3	1.5	Process Chemistry Lab	NCYC503
DP 2	0 0 3	1.5	Instrumental Method of Analysis Lab	NCYC504
DP 3	0 0 3	1.5	Chemical Biology Lab	NCYC505
Total Credits 22.5				

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	Reaction Engineering	NCHC514
DC 5	3 1 0	4	Computer aided drug design	NCYC506
DC 6	3 1 0	4	Clinical trials and Regulatory affairs	NCYC507
DE 3	3 0 0	3		
RM	3 0 0	3	Research Methodology	NCYC595
DP 4	0 0 3	1.5	Pharmaceutical documentation lab	NCYC508
DP 5	0 0 3	1.5	Chemical Engineering Lab	NCHC515
DP 6	0 0 3	1.5	Formulation/Manufacturing Lab	NCYC509
Total Credits 22.5				

Department of Civil Engineering

M.Tech (Civil)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Numerical Methods in Civil Engg	NCEC503
DC 2	3 1 0	4	Mechanics of Deformable Solids	NCEC501
DC 3	3 1 0	4	Mechanics of Geomaterials	NCEC502
DE 1	3 0 0	3		
DE 2	3 0 0	3		
DP 1	0 0 3	1.5	Computational Laboratory-I	NCEC504
DP 2	0 0 3	1.5	Civil Engineering Model Development Laborato	NCEC505
DP 3	0 0 3	1.5	Term Project-I	NCEC506
Total Credits 22.5				

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	Transportation System, Design, and Managem	NCEC507
DC 5	3 1 0	4	Engineering Hydrology and Hydraulics	NCEC508
DC 6	3 1 0	4	Finite Element Method	NCEC509
DE 3	3 0 0	3		
RM	3 0 0	3	Research Methodology and Statistics	NCEC595
DP 4	0 0 3	1.5	Advanced Testing Laboratory	NCEC510
DP 5	0 0 3	1.5	Term Project-II	NCEC511
DP 6	0 0 3	1.5	Computational Laboratory-II	NCEC512
Total Credits 22.5				

Department of Computer Science and Engineering

2 Year M.Tech (Computer Science and Engineering)

Semester I				
Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Advanced Data Structures & Algorithms	NCSC501
DC 2	3 1 0	4	Computing Techniques and Mathematical Tools	NCSC502
DC 3	3 1 0	4	Advanced Computer Networks	NCSC503
DE 1	3 0 0	3		
DE 2	3 0 0	3		
DP 1	0 0 3	1.5	Computing Techniques and Mathematical Tools Lab	NCSC504
DP 2	0 0 3	1.5	Advanced Data Structures & Algorithms Lab	NCSC505
DP 3	0 0 3	1.5	Advancod Computer Network Lab	NCSC506
Total Credits 22.5				

Seme			
Course Type	L-T-P	Credits	Name
DC 4	3 1 0	4	Advance
DC 5	3 1 0	4	Algorith
DC 6	3 1 0	4	Cryptogr
DE 3	3 0 0	3	
RM	3 0 0	3	Research
DP 4	0 0 3	1.5	Advance
DP 5	0 0 3	1.5	Algorith
DP 6	0 0 3	1.5	Cryptogr Lab
Total Cr			

For 3-Year Executive M.Tech (AI & DS)

Semester – I				
Course Type	L-T-P	Credits	Name of the Course to be offered	Course No.
DC 1	3 1 0	4	Advanced Data Structures & Algorithms	NCSC501
DC 2	3 1 0	4	Computing Techniques and Mathematical Tools	NCSC502
DC 3	3 1 0	4	Artificial Intelligence	NCSC513
Total Credits 12				

Seme			
Course Type	L-T-P	Credits	Name
DC 4	3 1 0	4	Advance
DC 5	3 1 0	4	Data Ana
DC 6	3 1 0	4	Deep Lea
Total Cr			

For 2-Year Executive M.Tech (AI & DS)

Semester – I				
Course Type	L-T-P	Credits	Name of the Course to be offered	Course No.
DC 1	3 1 0	4	Advanced Data Structures & Algorithms	NCSC501
DC 2	3 1 0	4	Computing Techniques and Mathematical Tools	NCSC502
DC 3	3 1 0	4	Artificial Intelligence	NCSC513
DE1	3 0 0	3	Computer Vision	NCSD503
DE2	3 0 0	3	Machine Learning	NCSD519
Total Credits 18				

Seme			
Course Type	L-T-P	Credits	Name
DC4	3 1 0	4	Advance
DC5	3 1 0	4	Data Ana
DC6	3 1 0	4	Deep Lea
DE3	3 0 0	3	Natural L
RM	3 0 0	3	Research
Total Cr			

M.Tech (Optical Communication and Integrated Photonics)

Semester I				
Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Emerging Communication Systems	NECC501
DC 2	3 1 0	4	Optical Fiber Communications	NECC505
DC 3	3 1 0	4	Wireless Networks	NECC503
DE 1	3 0 0	3		
DE 2	3 0 0	3		

Semester II				
Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	Optoelectronic and Photonic Devices	NECC506
DC 5	3 1 0	4	Optimization Theory and Techniques	NECC504
DC 6	3 1 0	4	Photonic Integrated Circuits	NECC507
DE 3	3 0 0	3		
RM	3 0 0	3	Research Methodology	NECC595

DP 1	0 0 3	1.5	5G Communication Systems Lab	NECC515
DP 2	0 0 3	1.5	Optical Communication Lab	NECC521
DP 3	0 0 3	1.5	Communication Networks Lab	NECC516
Total Credits 22.5				

DP 4	0 0 3	1.5	Optoelectronic and Photonic Devices Lab	NECC522
DP 5	0 0 3	1.5	Photonic IC CAD Lab	NECC523
DP 6	0 0 3	1.5	Photonics Project Lab	NECC524
Total Credits 22.5				

M.Tech (RF and Microwave Engineering)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Emerging Communication Systems	NECC501
DC 2	3 1 0	4	Advanced Engineering Electromagnetics	NECC508
DC 3	3 1 0	4	Microwave Measurements	NECC509
DE 1	3 0 0	3		
DE 2	3 0 0	3		
DP 1	0 0 3	1.5	5G Communication Systems Lab	NECC515
DP 2	0 0 3	1.5	RF and CAD Laboratory	NECC525
DP 3	0 0 3	1.5	Microwave Measurements Lab	NECC526
Total Credits 22.5				

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	Microwave Circuits and Networks	NECC535
DC 5	3 1 0	4	Advanced Antenna Theory	NECC534
DC 6	3 1 0	4	Microwave Transmission Lines and Matching Networks	NECC510
DE 3	3 0 0	3		
RM	3 0 0	3	Research Methodology	NECC595
DP 4	0 0 3	1.5	RF Circuits and Networks Simulation Lab	NECC538
DP 5	0 0 3	1.5	Antenna Simulation Lab	NECC539
DP 6	0 0 3	1.5	RF Project Lab	NECC540
Total Credits 22.5				

M.Tech (VLSI Design)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Analog IC Design	NECC511
DC 2	3 1 0	4	Digital IC Design	NECC512
DC 3	3 1 0	4	CAD for VLSI	NECC513
DE 1	3 0 0	3		
DE 2	3 0 0	3		
DP 1	0 0 3	1.5	Circuit Simulation Lab	NECC531
DP 2	0 0 3	1.5	HDL-based System Design Lab	NECC527
DP 3	0 0 3	1.5	VLSI Design and Project Lab-I	NECC528
Total Credits 22.5				

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	MOS Device Physics and Modeling	NECC514
DC 5	3 1 0	4	Current Mode Analog Circuits	NECC536
DC 6	3 1 0	4	Embedded System Design	NECC537
DE 3	3 0 0	3		
RM	3 0 0	3	Research Methodology	NECC595
DP 4	0 0 3	1.5	Device Simulation Lab	NECC529
DP 5	0 0 3	1.5	Embedded System Design Lab	NECC541
DP 6	0 0 3	1.5	VLSI Design and Project Lab-II	NECC530
Total Credits 22.5				

Department of Electrical Engineering

M.Tech (Power System Engineering)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	ADVANCED CONTROL SYSTEM	NEEC501
DC 2	3 1 0	4	POWER SYSTEM ANALYSIS	NEEC502
DC 3	3 1 0	4	HVDC TRANSMISSION AND FACTS	NEEC503
DE 1	3 0 0	3		
DE 2	3 0 0	3		
DP 1	0 0 3	1.5	ADVANCED POWER SYSTEM LAB	NEEC504
DP 2	0 0 3	1.5	ADVANCED ELECTRICAL MACHINE LAB	NEEC505
DP 3	0 0 3	1.5	ADVANCED CONTROL SYSTEM LAB	NEEC506
Total Credits 22.5				

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	SOFT COMPUTING TECHNIQUES	NEEC508
DC 5	3 1 0	4	ADVANCED POWER SYSTEM PROTECTION	NEEC509
DC 6	3 1 0	4	SMART GRID TECHNOLOGY	NEEC507
DE 3	3 0 0	3		
RM	3 0 0	3	RESEARCH METHODOLOGY & STATISTICS FOR EE	NEEC595
DP 4	0 0 3	1.5	ADVANCED SIMULATION LAB	NEEC518
DP 5	0 0 3	1.5	ADVANCED POWER SYSTEM PROTECTION LAB	NEEC513
DP 6	0 0 3	1.5	ADVANCED MEASUREMENT AND INSTRUMENTATION LAB	NEEC519
Total Credits 22.5				

M.Tech (Power Electronics and Electrical Drives)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	ADVANCED CONTROL SYSTEM	NEEC501
DC 2	3 1 0	4	MODELLING OF ELECTRICAL MACHINES	NEEC514
DC 3	3 1 0	4	CONVERTER CONTROLLED MACHINE DRIVES	NEEC515
DE 1	3 0 0	3		
DE 2	3 0 0	3		
DP 1	0 0 3	1.5	ADVANCED POWER ELECTRONICS LAB	NEEC516
DP 2	0 0 3	1.5	ADVANCED ELECTRICAL MACHINE LAB	NEEC505
DP 3	0 0 3	1.5	ADVANCED CONTROL SYSTEM LAB	NEEC506
Total Credits 22.5				

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	ELECTRIC & HYBRID ELECTRIC VEHICLES	NEEC512
DC 5	3 1 0	4	ELECTROMAGNETIC COMPATIBILITY OF POWER CONVERTER	NEEC510
DC 6	3 1 0	4	DIGITAL CONTROL OF POWER ELECTRONICS AND DRIVES	NEEC511
DE 3	3 0 0	3		
RM	3 0 0	3	RESEARCH METHODOLOGY & STATISTICS FOR EE	NEEC595
DP 4	0 0 3	1.5	ADVANCED SIMULATION LAB	NEEC518
DP 5	0 0 3	1.5	ADVANCED DRIVES LAB	NEEC517
DP 6	0 0 3	1.5	ADVANCED MEASUREMENT AND INSTRUMENTATION LAB	NEEC519
Total Credits 22.5				

Department of Environmental Science and Engineering

M.Tech (Environmental Science and Engineering)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Advanced Data Structures & Algorithms	NCSC501

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	Integrated Solid Waste Management	NESC507

DC 2	3 1 0	4	Computing Techniques and Mathematical Tools	NCSC502
DC 3	3 1 0	4	Advanced Computer Networks	NCSC503
DE 1	3 0 0	3		
DE 2	3 0 0	3		
DP 1	0 0 3	1.5	Computing Techniques and Mathematical Tools Lab	NCSC504
DP 2	0 0 3	1.5	Advanced Data Structures & Algorithms Lab	NCSC505
DP 3	0 0 3	1.5	Advanced Computer Network Lab	NCSC506
Total Credits 22.5				

DC 5	3 1 0	4	Numerical Methods for Environmental Application	NESC508
DC 6	3 1 0	4	Environmental Remote Sensing & GIS	NESC509
DE 3	3 0 0	3		
RM	3 0 0	3	Research Methodology	NESC595
DP 4	0 0 3	1.5	Integrated Solid Waste Management Practical	NESC510
DP 5	0 0 3	1.5	Environmental Computational Lab	NESC511
DP 6	0 0 3	1.5	Environmental Remote Sensing & GIS Practical	NESC512
Total Credits 22.5				

Department of Humanities and Social

M.A( ) Digital Humanities and Social Sciences

Semester				
Course	L-T-	Credits	Name of the Course	Course
DC	3 1 0	4	Introduction to Digital	NHSC5
DC	3 1 0	4	Statistics for Humanities and Social	NHSC5
DC	3 1 0	4	Corpus	NHSC5
DC	3 00	3	E –	NHSC5
R	3 00	3	Research	NHSC5
DP	0 03	1.	Effective Communication	NHSC5
DP	0 03	1.	Social Research	NHSC5
Total Credits				

Semester				
Course	L-T-	Credits	Name of the Course	Course
DC	3 1 0	4	Python Programming	NHSC5
DC	3 1 0	4	Text	NHSC5
DC	3 1 0	4	Digital	NHSC5
DC	3 00	3	Digital	NHSC5
DE	3 00	3	-	
DP	0 03	1.	Natural Language Processing	NHSC5
Total Credits				

Department of Fuel, Minerals and Metallurgical Engineering

M.Tech (Fuel & Energy Engineering)

Semester I				
Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Fuel Technology	NFMC522
DC 2	3 1 0	4	Coal & Mineral Beneficiation	NFMC502
DC 3	3 1 0	4	Alternate Energy Systems	NFMC523
DE 1	3 0 0	3		
DE 2	3 0 0	3		
DP 1	0 0 3	1.5	Thermochemical Conversion Lab	NFMC524
DP 2	0 0 3	1.5	Fuel Technology Lab	NFMC506
DP 3	0 0 3	1.5	Mineral Processing Lab	NFMC505
Total Credits 22.5				

Semester II				
Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	Energy Technology	NFMC525
DC 5	3 1 0	4	CFD of Thermal and Fluid Systems	NFMC526
DC 6	3 1 0	4	Processing of Liquid and Gaseous Fuels	NFMC527
DE 3	3 0 0	3		
RM	3 0 0	3	Research Methodology	NFMC595
DP 4	0 0 3	1.5	CFD of Thermal and Fluid Systems Lab	NFMC528
DP 5	0 0 3	1.5	Processing of Liquid and Gaseous Fuels Lab	NFMC529
DP 6	0 0 3	1.5	Energy Technology Lab	NFMC530
Total Credits 22.5				

M.Tech (Mineral Engineering)

Semester I				
Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Size Preparation Technology	NFMC501
DC 2	3 1 0	4	Coal & Mineral Beneficiation	NFMC502
DC 3	3 1 0	4	Process Metallurgy	NFMC503
DE 1	3 0 0	3		
DE 2	3 0 0	3		
DP 1	0 0 3	1.5	Non-ferrous Extractive Metallurgy Lab	NFMC504
DP 2	0 0 3	1.5	Mineral Processing Lab	NFMC505
DP 3	0 0 3	1.5	Fuel Technology Lab	NFMC506
Total Credits 22.5				

Semester II				
Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	Process Equipment Selection	NFMC507
DC 5	3 1 0	4	Flowsheet Design & Plant Layout	NFMC508
DC 6	3 1 0	4	Modeling of Mineral Processing Systems	NFMC509
DE 3	3 0 0	3		
RM	3 0 0	3	Research Methodology	NFMC595
DP 4	0 0 3	1.5	Simulation of Mineral Processing Systems Lab	NFMC510
DP 5	0 0 3	1.5	Fines Processing Lab	NFMC511
DP 6	0 0 3	1.5	Energy Technology Lab	NFMC530
Total Credits 22.5				

M.Tech (Metallurgical Engineerin g)

Semester I				
Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Mechanical Behaviour of Materials	NFMC513
DC 2	3 1 0	4	Advanced Thermodynamics and Kinetics	NFMC514
DC 3	3 1 0	4	Process Metallurgy	NFMC503
DE 1	3 0 0	3		
DE 2	3 0 0	3		
DP 1	0 0 3	1.5	Non-ferrous Extractive Metallurgy Lab	NFMC504
DP 2	0 0 3	1.5	Mechanical Behaviour of Materials Lab	NFMC515
DP 3	0 0 3	1.5	Computer Applications in Metallurgical Engineering lab	NFMC516
Total Credits 22.5				

Semester II				
Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	Advanced Physical Metallurgy	NFMC517
DC 5	3 1 0	4	Materials Characterization	NFMC518
DC 6	3 1 0	4	Advanced Iron-Making Technologies	NFMC519
DE 3	3 0 0	3		
RM	3 0 0	3	Research Methodology	NFMC595
DP 4	0 0 3	1.5	Materials Processing Lab	NFMC520
DP 5	0 0 3	1.5	Materials Characterization Lab	NFMC521
DP 6	0 0 3	1.5	Energy Technology Lab	NFMC530
Total Credits 22.5				

Department of Management Studies and Industrial Engineering

MBA

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Organizational Behaviour	NMSC513
DC 2	3 1 0	4	Decision Modeling	NMSC502
DC 3	3 0 0	3	Managerial Economics	NMSC514
DC 4	3 0 0	3	Management Principles & Practice	NMSC515
DC 5	3 1 0	4	Financial Accounting and Reporting	NMSC516
DP 1	0 0 3	1.5	Spreadsheet Modelling	NMSC505
Total Credits 19.5				

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 6	3 0 0	3	Corporate Finance	NMSC517
DC 7	3 1 0	4	Project Management	NMSC508
DC 8	3 0 0	3	Research Methodology and Statistics	NMSC595
DC 9	3 1 0	4	Operations Management	NMSC509
DC 10	3 0 0	3	Marketing Management	NMSC518
DC 11	3 0 0	3	Human Resource Management	NMSC519
DP 2	0 0 2	1	Business Analytics Lab	NMSC520
Total Credits 21				

MBA (BA)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 0 0	3	Statistical Methods & Applications	NMSC521
DC 2	3 1 0	4	Decision Modeling	NMSC502
DC 3	3 1 0	4	Machine Learning	NMSC503
DC 4	3 1 0	4	Data Mining for Business	NMSC522
DC 5	3 1 0	4	Financial Accounting and Reporting	NMSC516
DP 1	0 0 3	1.5	Machine Learning Lab	NMSC506
Total Credits 20.5				

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 6	3 0 0	3	Corporate Finance	NMSC517
DC 7	3 1 0	4	Project Management	NMSC508
DC 8	3 0 0	3	Stochastic Processes	NMSC524
DC 9	3 0 0	3	Advanced DBMS	NMSC525
DC 10	3 0 0	3	Marketing Management	NMSC518
DC 11	3 0 0	3	Human Resource Management	NMSC519
DP 2	0 0 2	1	Advanced DBMS Lab	NMSC526
Total Credits 20				

Executive MBA

Semester I

Course Type	L-T-	Credits	Name of the Course offered	Course Code
DC	3 1 0	4	Organizati onal Behaviour	NMSC51
DC	3 1 0	4	Decision Modeling	NMSC50
DC	3 0 0	3	Managerial Economics	NMSC51
DC	3 00	3	Management Principles &Practice	NMSC51
DC	3 1 0	4	Financial Accounti ng &Reporti ng	NMSC51
DP	0 03	1.5	Spreadsheet Modelling	NMSC50
Total Credits 19.5				

Semester II

Course Type	L-T-	Credits	Name of the Course offered	Course Code
DC	3 00	3	Corporate Finance	NMSC51
DC	3 1 0	4	Project Management	NMSC50
DC	3 0 0	3	Research Methodology and Statistics	NMSC59
DC	3 1 0	4	Operations Management	NMSC50
DC	3 00	3	Marketing Management	NMSC51
DC	3 00	3	Human Resource Management	NMSC51
DP	0 02	1.0	Business Analytics Lab	NMSC52
Total Credits 21				

M.Tech (Industrial Engineering and Management)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Manufacturing System Engineering	NMSC501
DC 2	3 1 0	4	Decision Modeling	NMSC502
DC 3	3 1 0	4	Machine Learning	NMSC503
DE 1	3 0 0	3		

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	Work Study & Ergonomics	NMSC507
DC 5	3 1 0	4	Project Management	NMSC508
DC 6	3 1 0	4	Operations Management	NMSC509
DE 3	3 0 0	3		

DE 2	3 0 0	3		
DP 1	0 0 3	1.5	Stochastic Programming Lab	NMSC504
DP 2	0 0 3	1.5	Spreadsheet Modelling	NMSC505
DP 3	0 0 3	1.5	Machine Learning Lab	NMSC506
Total Credits 22.5				

RM	3 0 0	3	Research Methodology & Statisitcs	NMSC595
DP 4	0 0 3	1.5	Software Lab	NMSC510
DP 5	0 0 3	1.5	Simulation Modelling & Analysis Lab	NMSC511
DP 6	0 0 3	1.5	Work Study & Ergonomics Lab	NMSC512
Total Credits 22.5				

Department of Mathematics & Computing

M.Sc. (Mathematics and Computing)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Probability & Statistics	NMCC513
DC 2	3 1 0	4	Advanced Algebra	NMCC514
DC 3	3 1 0	4	Differential Equations	NMCC515
DC 4	3 0 0	3	Advanced Numerical Methods	NMCC516
DC 5	3 0 0	3	Data Structures	NMCC517
DP 1	0 0 3	1.5	Advanced Numerical Methods Practical	NMCC518
DP 2	0 0 3	1.5	Data Structures Practical	NMCC519
Total Credits 21				

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 6	3 1 0	4	Functional Analysis	NMCC520
DC 7	3 1 0	4	Topology	NMCC521
DC 8	3 0 0	3	Operating Systems	NMCC522
DC 9	3 0 0	3	Database Management Systems	NMCC523
DE 1	3 0 0	3		
DP 3	0 0 3	1.5	Operating Systems Practical	NMCC524
DP 4	0 0 3	1.5	Data Base Management Systems Practical	NMCC525
Total Credits 20				

M.Tech (Data Analytics)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Numerical Linear Algebra	NMCC501
DC 2	3 1 0	4	Fundamentals of Machine Learning	NMCC502
DC 3	3 1 0	4	Statistics in Decision Makings	NMCC503
DE 1	3 0 0	3		
DE 2	3 0 0	3		
DP 1	0 0 3	1.5	Numerical Linear Algebra Lab	NMCC504
DP 2	0 0 3	1.5	Fundamentals of Machine Learning Practical	NMCC505
DP 3	0 0 3	1.5	Statistics in Decision Makings Practical	NMCC506
Total Credits 22.5				

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	Advanced DBMS	NMCC507
DC 5	3 1 0	4	Neural Networks and Deep Learning	NMCC508
DC 6	3 1 0	4	Advanced Data Structures & Algorithm	NMCC509
DE 3	3 0 0	3		
RM	3 0 0	3		
DP 4	0 0 3	1.5	Advanced DBMS Practical	NMCC510
DP 5	0 0 3	1.5	Neural Networks and Deep Learning Practical	NMCC511
DP 6	0 0 3	1.5	Advanced Data Structures & Algorithm Practical	NMCC512
Total Credits 22.5				

Department of Mechanical Engineering

M.Tech (Manufacturing Engineering)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Machining Science	NMEC501
DC 2	3 1 0	4	Thermo Production Process	NMEC502

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	Additive Manufacturing	NMEC525
DC 5	3 1 0	4	CAM and Automation	NMEC526

DC 3	3 1 0	4	Theory of Metal Forming	NMEC503
DE 1	3 0 0	3		
DE 2	3 0 0	3		
DP 1	0 0 3	1.5	Thermo-Production Lab	NMEC504
DP 2	0 0 3	1.5	Modelling and Simulation Lab	NMEC505
DP 3	0 0 3	1.5	Machining Lab	NMEC506
Total Credits 22.5				

DC 6	3 1 0	4	Unconventional Manufacturing Processes	NMEC536
DE 3	3 0 0	3		
RM	3 0 0	3	Research Methodology	NMEC595
DP 4	0 0 3	1.5	CAM and Mechatronics Lab	NMEC527
DP 5	0 0 3	1.5	Additive Manufacturing Lab	NMEC528
DP 6	0 0 3	1.5	Unconventional Manufacturing Lab	NMEC529
Total Credits 22.5				

M.Tech (Thermal Engineering)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Numerical Methods	NMEC513
DC 2	3 1 0	4	Advanced Fluid Dynamics	NMEC514
DC 3	3 1 0	4	Advanced Thermodynamics	NMEC515
DE 1	3 0 0	3		
DE 2	3 0 0	3		
DP 1	0 0 3	1.5	Thermo-Fluids Lab-I	NMEC516
DP 2	0 0 3	1.5	Thermo-Fluids Lab-II	NMEC517
DP 3	0 0 3	1.5	Computing Lab	NMEC518
Total Credits 22.5				

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	Computaional Fluid Dynamics	NMEC522
DC 5	3 1 0	4	Conduction and Radiation	NMEC523
DC 6	3 1 0	4	Convection and Two-Phase Flow	NMEC524
DE 3	3 0 0	3		
RM	3 0 0	3	Research Methodology	NMEC595
DP 4	0 0 3	1.5	Computaional Fluid Dynamics Lab	NMEC530
DP 5	0 0 3	1.5	Thermo-fluids Lab – III	NMEC531
DP 6	0 0 3	1.5	Solar Thermal lab	NMEC532
Total Credits 22.5				

M.Tech (Machine Design)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Theory of Elasticity	NMEC507
DC 2	3 1 0	4	Mechanical Vibration	NMEC508
DC 3	3 1 0	4	Finite Element Methods	NMEC509
DE 1	3 0 0	3		
DE 2	3 0 0	3		
DP 1	0 0 3	1.5	Computation Lab	NMEC510
DP 2	0 0 3	1.5	Mechanical Vibration Lab	NMEC511
DP 3	0 0 3	1.5	Structural Modelling and Simulation lab	NMEC512

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	Fracture Mechanics	NMEC519
DC 5	3 1 0	4	Advanced Dynamics	NMEC520
DC 6	3 1 0	4	Control System	NMEC521
DE 3	3 0 0	3		
RM	3 0 0	3	Research Methodology	NMEC595
DP 4	0 0 3	1.5	Control System Lab	NMEC533
DP 5	0 0 3	1.5	Mechanical Characterization Lab	NMEC534
DP 6	0 0 3	1.5	Research Methodology Lab 2	NMEC535
Total Credits 22.5				

Department of Mining Engineering

M.Tech (Mining Engineering)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Computational Geomechanics and Ground Control	NMNC501
DC 2	3 1 0	4	Computational Subsurface Ventilation and Environment	NMNC502
DC 3	3 1 0	4	Risk and Workplace Safety Management	NMNC503
DE 1				
DE 2				
DP 1	0 0 3	1.5	Computational Geomechanics and Ground Control Lab	NMNC504
DP 2	0 0 3	1.5	Computational Subsurface Ventilation and Environment Lab	NMNC505
DP 3	0 0 3	1.5	Numerical Modelling Lab	NMNC506
Total Credits 22.5				

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	Mine Planning and Design	NMNC515
DC 5	3 1 0	4	Mining Equipment Reliability, Maintainability, and Availability	NMNC516
DC 6	3 1 0	4	Mass Production Mining Technology	NMNC517
DE 3	3 0 0			
RM	3 0 0	3	Research Methodology	NMNC595
DP 4	0 0 3	1.5	Mine Simulation and Data Analytics Practical	NMNC518
DP 5	0 0 3	1.5	Computer Aided Mine Planning and Design Practical	NMNC519
DP 6	0 0 3	1.5	Safety Health and Ergonomics Practical	NMNC520
Total Credits 22.5				

M.Tech (Geomatics)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Mine Surveying Techniques	NMNC509
DC 2	3 1 0	4	Geographical Information System	NMNC510
DC 3	3 1 0	4	Remote Sensing and Digital Image Processing	NMNC511
DE 1	3 0 0	3		
DE 2	3 0 0	3		
DP 1	0 0 3	1.5	Remote Sensing and Image Processing Lab	NMNC512
DP 2	0 0 3	1.5	GIS Lab	NMNC513
DP 3	0 0 3	1.5	Advanced Surveying Lab	NMNC514
Total Credits 22.5				

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	Geodesy and GNSS Survey	NMNC525
DC 5	3 1 0	4	Microwave Remote Sensing	NMNC526
DC 6	3 1 0	4	Computer Aided Mine Planning and Design	NMNC527
DE 3	3 0 0	3		
RM	3 0 0	3	Research Methodology	NMNC595
DP 4	0 0 3	1.5	Microwave Remote Sensing Practical	NMNC528
DP 5	0 0 3	1.5	Geospatial Data Modelling Practical	NMNC529
DP 6	0 0 3	1.5	Mine Surveying Camp	NMNC530
Total Credits 22.5				

M.Tech (Tunneling and Underground Space Technology)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Geomechanics for Underground Space	NMNC507
DC 2	3 1 0	4	Computational Subsurface Ventilation and Environment	NMNC502
DC 3	3 1 0	4	Risk and Workplace Safety Management	NMNC503
DE 1	3 0 0	3		
DE 2	3 0 0	3		
DP 1	0 0 3	1.5	Geomechanics Lab	NMNC508
DP 2	0 0 3	1.5	Computational Subsurface Ventilation and Environment Lab	NMNC505
DP 3	0 0 3	1.5	Numerical Modelling Lab	NMNC506
Total Credits 22.5				

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	3	Planning and Design for Tunnels and Caverns	NMNC521
DC 5	3 1 0	3	Excavation Methods for Tunnels and Caverns	NMNC522
DC 6	3 1 0	3	NATM and TBM Tunneling	NMNC523
DE 3	3 0 0	3		
RM	3 0 0	3	Research Methodology	NMNC595
DP 4	0 0 3	1.5	Rock Excavation Practical	NMNC524
DP 5	0 0 3	1.5	Mine Simulation and Data Analytics lab	NMNC518
DP 6	0 0 3	1.5	Safety Health and Ergonomics Practical	NMNC520
Total Credits 22.5				

Department of Petroleum Engineering

M.Tech (Petroleum Engineering)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Advanced Production Technologies	NPEC501
DC 2	3 1 0	4	Advanced Well Testing	NPEC502
DC 3	3 1 0	4	Formation Evaluation and Production Logging	NPEC503
DE 1	3 0 0	3		
DE 2	3 0 0	3		
DP 1	0 0 3	1.5	Reservoir Characterization	NPEC504
DP 2	0 0 3	1.5	Term paper/Mini Project	NPEC505
DP 3	0 0 3	1.5	Production Logging Practical	NPEC506
Total Credits 22.5				

Semester II

Course Type	L-T-P	Credits	Name of the Course to be offered	Course Code
DC 4	3 1 0	4	Petroleum Geomechanics and Hydraulic Fractu	NPEC507
DC 5	3 1 0	4	Advanced Drilling Technology	NPEC508
DC 6	3 1 0	4	Numerical Methods for Petroleum Engineers	NPEC509
DE 3	3 0 0	3		
RM	3 0 0	3	Research Methodology	NPEC595
DP 4	0 0 3	1.5	Petroleum Instrumentation and Measurements	NPEC510
DP 5	0 0 3	1.5	Development of Working Models	NPEC511
DP 6	0 0 3	1.5	Advanced Drilling Simulation Lab	NPEC512
Total Credits 22.5				

Department of Physics

M.Sc. (Physics)

Semester I

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 1	3 1 0	4	Classical Mechanics and Special Theory of Relativity	NPHC501
DC 2	3 1 0	4	Methods of Mathematical Physics	NPHC502
DC 3	3 1 0	4	Quantum Mechanics-I	NPHC503
DC 4	3 0 0	3	Electronics	NPHC504
DC 5	3 0 0	3	Numerical Methods and Computer Programming	NPHC505
DP 1	0 0 3	1.5	Experimental Physics I	NPHC506
DP 2	0 0 3	1.5	Experimental Physics II	NPHC507
Total Credits 21				

Semester II

Course Type	L-T-P	Credits	Name of the Course offered	Course Code
DC 6	3 1 0	4	Quantum Mechanics-II	NPHC508
DC 7	3 1 0	4	Electrodynamics and Radiation theory	NPHC509
DC 8	3 0 0	3	Nuclear and Particle Physics	NPHC510
DC 9	3 0 0	3	Condensed Matter Physics	NPHC511
DE 1	3 0 0	3		
DP 3	0 0 3	1.5	Experimental Physics III	NPHC512
DP 4	0 0 3	1.5	Experimental Physics IV	NPHC513
Total Credits 20				

Notification of New Ph.D. Template as per NEP 2020

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/841 23.10.2024

NOTIFICATION

NEW Ph.D. PROGRAM TEMPLATE (AS NEP 2020)

The new Ph.D. program template, as applicable from the batch admitted in MS 2024-25, is enclosed for the reference of all. The scholars who started their coursework in MS 2024-25 will also follow the new template.

Kindly note that in addition to the given credits, some non-credit units are also required to be necessarily earned to successfully complete the program {notification dated 18.09.2024 enclosed for reference. Office of Dean (Students' Welfare) will provide the details in this regard in due course/shortly}.

Dean (Academic)

Copy to: Director / Dy. Director
All Deans / Assoc. Deans / HoDs
Registrar
DR (Acad) / AR (UG) / AR (PG) / AR (SW)
All Ph.D. scholars

Detail of minimum credits required for Ph.D.

Source of Credits	Minimum no. of Courses or Credits required	Remarks
Coursework*	4 + 2 (including RM, RTC in S/X mode) for eligible PG scholars; 6 + 2 (including RM, RTC in S/X mode) for scholars with B.Tech	To be considered for CGPA of coursework (except RM, RTC).
Research work (Thesis Units)	100 credits (S/X)	Maximum 20 credits of thesis units allowed to be taken in each regular semester

*Registration and award of S grade in Research Methodology as well as in Research and Technical Communication courses, after the recommendation of the respective DSC, upon fulfilment of the publication criterion for pre-submission seminar in Ph.D., is also allowed.

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/ 825 18th September, 2024

NOTIFICATION

REVISION IN NON CREDIT UNITS

The approved revision in Non Credit Units (in NEP regime), as recommended by the DSW Office, is enclosed for the information of all.

18/09/2024
Dean (Academic)

Copy to:

1. Director/Deputy Director
2. Registrar
3. All Deans/ Associate Deans/ FIC (Automation)
4. All HODs
5. DR (Acad)/ AR (PG)/ AR(UG)/ AR(SW)/ SPO

Subject: Proposal for Non-credit Units to be implemented w.e.f. MS 2024-25

The following proposed is placed before the Senate to give recommendations for the implementation of changes in line with NEP 2020 on the system of Non-Credit Units to be implemented from MS 2024-25. The following are the details:

Non-Credit Unit & Minimum Units required for each program:

Sl.no.	Program	Discipline (2 units per semester)	NCC/NSS/NSO/ CCS/Yoga (2 units per semester for 1st two years) Sl. No. 1-5 to be assessed during even semesters(2nd & 4th)only & Sl.no. 6-12 to be assessed during odd semester (1st & 3rd) only Under CCS 101 & CCS 102	Community Outreach/ Community Services/ Sports/Student Club Activities/ Cultural Activities/ NVCTI Activities (2 units per semester for 1st two years) Sl. No. 1-5 to be assessed during even semesters(2nd & 4th) only & Sl.no. 6-12 to be assessed during odd semester (1st & 3rd) only	Other CCA or recognition in Inter IIT / Inter University / State / National / International events (during entire period) *	Maximum non-credit units that can be earned	Minimum noncredit units to be earned for the successful completion of the program [C(50 %)+D (at least 2 units) + E(at least 2 units)+F(Optional Or Add on)]= H
A	B	C	D	E	F	G	H
1	B.Tech.	16	4	4	4	28	20
2	B.Tech. with Minor	16	4	4	4	28	20
3	Double Major	20	4	4	4	32	24
4	Dual Degree (Category A/B/C)	20	4	4	4	32	24
5	Int. M.Tech.	20	4	4	4	32	24
6	M.Tech.	8	4	4	4	20	12
	M.Sc. Tech.	12	4	4	4	24	16
8	M.Sc.	8	4	4	4	20	12
9	MBA	8	4	4	4	20	12
10	MBA (BA)	8	4	4	4	20	12
11	MA	8	4	4	4	20	12

12	**Ph.D. (Full Time)**	2 per sem.	4	4	4	12 + 2 per sem.	40%

** For participation in Inter IIT / Inter University / State / National / International events, **2 units** will be credited.*

*** For each indiscipline negative 1 unit minimum & maximum up to 4 unit depending upon severity (Discipline grading may be decided by the Office of DSW) will be awarded*

**** Min discipline unit to be decided e.g. 50 % of the total discipline units if 16 then at least 8 and so on.*

#in the event, if any one shortfalls of minimum non-credit units, a make-up test may be conducted under CCS or special programme at the end of courses if required

Weightage of different components of evaluation in regular theory Courses

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

OFFICE OF THE DEAN (ACADEMIC)

No. IITISM/DAC/852 30 December 2024

NOTIFICATION

WEIGHTAGE OF DIFFERENT COMPONENTS OF EVALUATION IN REGULAR THEORY COURSES WITH EFFECT FROM WINTER SEMESTER 2024-25

The Senate has approved that the following weightage be considered for different components of evaluation in all regular theory courses (except in practical and audit courses) w.e.f. Winter Semester 2024-25:

(i)	Quiz/ Case study/ Assignment etc*	- 10 Marks
(ii)	Mid Semester Examination	- 30 Marks
(iii)	Quiz/ Case study/ Assignment etc*	- 10 Marks
(iv)	End Semester Examination	- 50 Marks
	Total Marks	- 100

* Class attendance should not be a component under this head. Moreover, One Quiz/ Case study/ Assignment etc. of 10 marks should be conducted before mid-semester examination and the other Quiz/ Case study/ Assignment etc. of 10 marks should be conducted after mid-semester examination.

The final grading for a course will be done for the class, based on the total marks received by students out of 100.

Dean (Academic)

Copy to:

1. Director/Deputy Director
2. Registrar
3. All Deans/ Associate Deans
4. All HODs
5. DR (Acad)/ Systems Engineer (MIS) / AR (PG)/ AR(UG)