



भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ) धनबाद  
INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD  
धनबाद-826004, झारखण्ड, भारत  
DHANBAD-826004, JHARKHAND, INDIA

No. Exam/219800/2018-19/2295

Dated: 16.04.2019

**OFFICIAL TRANSCRIPT**

**TO WHOM IT MAY CONCERN**

This is to certify that **Mr/Ms Mohd Faraz Khan, Adm.No. 16MT001071** was a student of this Institute. **She/He** passed **2-years M.Tech (Environmental Science & Engineering)** Course in the year 2018 with an OGPA/CGPA 8.14. The medium of instruction at this Institute is English.

His/ Her duly verified Consolidated Transcript (I to IV Semesters) and Degree Certificate is attached.

It may be noted that as per Government of India Notification vide S.O.2870(E) of No. 2173, Part- II, Section 3-Sub section (ii) of the Gazette of India, dated 06/09/2016, the Indian School of Mines be called as Indian Institute of Technology (Indian School of Mines) Dhanbad with effect from 6<sup>th</sup> September, 2016.

  
(P Mathur)

Joint Registrar (Exam & Acad)  
([exam@iitism.ac.in](mailto:exam@iitism.ac.in))

CC: **Mr/ Ms Mohd Faraz Khan,**  
**Adm No 16MT001071,**  
**2-years M.Tech (Environmental Science & Engineering)** for information.

1926 से राष्ट्र की सेवा में

In service of the Nation since 1926

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD  
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भारतीय प्रौद्योगिकी संस्थान ( भारतीय खनि विद्यापीठ ), धनबाद  
Indian Institute of Technology (Indian School of Mines), Dhanbad  
धनबाद / DHANBAD - 826004, भारत / INDIA

**CONSOLIDATED TRANSCRIPT**

Name: MOHD FARAZ KHAN  
Admission No: 16MT001071

1 SEMESTER EXAMINATION		2016-17	SUMMER	REGULAR
SUBJECT	CR. HRS.	CR. PTS.	GRADE	
ADVANCED NUMERICAL METHODS AND APPLIED STATISTICS	7	63	A	
ECOLOGY, BIODIVERSITY AND ENVIRONMENTAL MICROBIOLOGY	7	56	B+	
WATER SUPPLY AND TREATMENT	7	49	B	
ENVIRONMENTAL CHEMISTRY	7	49	B	
PRINCIPLES OF AIR AND NOISE POLLUTION	7	49	B	
ECOLOGY AND ENVIRONMENTAL MICROBIOLOGY PRACTICAL	2	18	A	
ENVIRONMENTAL CHEMISTRY PRACTICAL	2	18	A	
AIR AND NOISE POLLUTION PRACTICAL	2	18	A	
FIELD AND INDUSTRIAL VISITS AND SEMINAR (S)	2	18	A	
ENVIRONMENTAL GEOLOGY AND RESOURCE MANAGEMENT	6	60	A+	
Result: PASS	49	398	GPA: 8.12	
3 SEMESTER EXAMINATION		2017-18	MONSOON	REGULAR
SUBJECT	CR. HRS.	CR. PTS.	GRADE	
TEACHING ASSIGNMENT / LABORATORY DEVELOPMENT	5	50	A+	
SEMINAR AND VIVA VOCE	2	14	B	
SEMINAR AND VIVA-VOCE ON DISSERTATION	10	60	C+	
COMPREHENSIVE VIVA-VOCE	4	16	D	
INDUSTRIAL TRAINING/ MINOR PROJECT	4	36	A	
DISSERTATION (INTERIM)	15	150	A+	
Result: PASS	40	326	GPA: 8.15	

Course: MASTER OF TECHNOLOGY  
Branch: ENVIRONMENTAL SCIENCE AND ENGINEERING

2 SEMESTER EXAMINATION		2016-17	WINTER	REGULAR
SUBJECT	CR. HRS.	CR PTS.	GRADE	
ENVIRONMENTAL LAWS, IMPACT ASSESSMENT AND AUDITING	7	49	B	
WASTEWATER ENGINEERING	7	56	B+	
SOLID WASTE MANAGEMENT AND LAND RECLAMATION	7	56	B+	
DESIGN OF AIR POLLUTION CONTROL SYSTEMS	7	49	B	
WASTEWATER ENGINEERING PRACTICAL	2	12	C+	
SOLID WASTE MANAGEMENT AND LAND RECLAMATION LAB	2	18	A	
FIELD VISITS, EXCURSIONS AND SEMINAR	2	16	B+	
REMOTE SENSING AND GIS	6	48	B+	
LIFE CYCLE ASSESSMENT	6	42	B	
Result: PASS	46	346	GPA: 7.52	
4 SEMESTER EXAMINATION		2017-18	WINTER	REGULAR
SUBJECT	CR. HRS.	CR PTS.	GRADE	
TEACHING ASSIGNMENT / LABORATORY DEVELOPMENT	5	50	A+	
SEMINAR ON DISSERTATION	5	45	A	
VIVA-VOCE ON DISSERTATION	10	80	B+	
DISSERTATION	20	180	A	
Result: PASS	40	355	GPA: 8.88	

RESULT: PASS

CUMM\_HRS: 175

CUMM\_POINTS: 1425

OGPA: 8.14

DATE:08 MAY 2018

VERIFIED

VERIFIED

CHECKED

JT.REGISTRAR(EXAM & ACAD)

Joint Registrar  
(Examination & Academic)  
Indian Institute of Technology  
(Indian School of Mines)  
Dhanbad-826004



भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

अभिषद् की अनुशंसा पर

मोहम्मद फराज़ ख़ान

को

पर्यावरण विज्ञान एवं अभियांत्रिकी में

मास्टर ऑफ टेक्नोलॉजी

की उपाधि

प्रथम श्रेणी



में, विनियमों में विहित अर्हताओं को दिनांक 8 मई 2018 को सफलतापूर्वक पूर्ण कर लेने के उपरांत, भारतीय गणराज्य के अंतर्गत धनबाद में यह मुद्रांकित उपाधि दिनांक 13 सितम्बर 2018 को प्रदान करता है।

Indian Institute of Technology (Indian School of Mines), Dhanbad

On the recommendation of the Senate, hereby confers the Degree of  
Master of Technology

in

Environmental Science and Engineering

in

First Class

on

Mohd Faraz Khan

Joint Registrar  
(Examination & Academic)  
Indian Institute of Technology  
(Indian School of Mines)  
Dhanbad-826004

who has successfully completed the requirements prescribed under the regulations for the award of this degree on 08 May 2018.

Given this day, under the seal of the Institute at Dhanbad in the Republic of India, the 13th day of September, 2018.

कुलसचिव  
Registrar

निदेशक एवं अध्यक्ष, अभिषद्  
Director &  
Chairman, Senate

अध्यक्ष, शासक मंडल  
Chairman,  
Board of Governors



## EXPLANATION AND CALCULATION

### Award of Grades

IIT (ISM) follows relative grading system for the students admitted from 2013-14 session. The relative grading is determined as follows:

The score of the topper in class (T) would be subtracted by 35 (i.e. minimum mark to pass) to find the range of marks (R). The range R would be divided by the number of grade admissible for the range to find the range of each grade (Q). If Q is a fractional number, the next higher integer will be considered, else the integral part is considered. If T be the top score, the range for the highest grade is limited by T to (T-Q+1) (inclusively). The range for the immediately lower grade is determined similarly by progressively subtracting Q from the next lower number, i.e. (T-Q) to (T-2Q+1).

For other students, grades are based on range of marks (absolute grade). The performance level, grade points and the grade symbols used are given below:

Grade	Performance Level	Grade Point	Range of marks (For absolute grading)
A+	Outstanding	10	91-100
A	Excellent	9	81-90
B+	Very Good	8	71-80
B	Good	7	61-70
C+	Above Average	6	51-60
C	Average	5	41-50
D	Pass	4	35-40
F	Fail	0	Below 35

### Credit Hours

Credit for each subject is calculated giving double weightage to lecture hours, and single weightage to the sessional and practical (For example if a subject has a L.T.P. 3-1-0, its credit hours will be  $3 \times 2 + 1 \times 1 + 0 = 7$ , or if the subject has L.T.P. of 0-0-2, its credit hours will be  $0 \times 1 + 0 \times 1 + 2 \times 1 = 2$ ).

### Weightage

Grade in each subject is awarded based on performance in sessional as well as the end-semester examination. For calculation of combined grade in a particular subject, 40% weightage is given to sessional and 60% weightage is given to the end-semester. For purely sessional subject, 100% weightage is given to the sessional. For practical subjects, 100% weightage is given to the practical.

### GPA

The following formula shall be used for calculating the Grade Point Average (GPA) for a semester:

$$GPA = \frac{TCP}{TCH} = \frac{G_1C_1 + G_2C_2 + G_3C_3 + \dots}{C_1 + C_2 + C_3 + \dots}$$

Where  $G_1, G_2$  etc stand for the grade point in a specified Subject and  $C_1, C_2$  etc. stand for credit hours of the respective subjects.

TCP stands for Total Credit obtained by the student.  
TCH stands for Total Credit for the Semester.

GPA stand for Grade Point Average and will be calculated up to 2<sup>nd</sup> place of decimal.

### CGPA/OGPA

The CGPA/OGPA (Cumulative/Overall Grade Point Average) for the whole programme is calculated on the basis of the Credit

obtained and Credit allotted to each semester as indicated below:

$$CGPA/OGPA = \frac{TCP_1 + TCP_2 + TCP_3 + \dots}{TCH_1 + TCH_2 + TCH_3 + \dots}$$

Where  $TCP_1, TCP_2$ , etc. stand for Total Credit for the specified Semester and  $TCH_1, TCH_2$ , etc. stand for Total Credit for the respective semester. Along with GPA of a semester, Cumulative/Overall Grade Point Average (CGPA/OGPA) is also shown in the Grade Card issued to students for Final Semester.

### Requirement for Passing etc.

In order to clear a subject, a student must obtain pass marks in the End Semester Examination. For Practical and Purely Sessional Subjects, pass marks shall be 35 out of 100. For passing a semester, a student must pass in all the subjects and secure a GPA of at least 5.00. For passing a course an OGPA of at least 5.00 is required.

The OGPA 5 < 7 OGPA, will be equivalent to pass in Second class. The OGPA 7 < 9 OGPA will be equivalent to pass in First Class. The OGPA 9 ≥ will be equivalent to pass in First Class with Distinction.

### Equivalence of GPA / OGPA to percentage

For relative grading, the equivalent percentage of marks will be calculated as:  $(CGPA/OGPA - 0.5) \times 10$  and the minimum required equivalent percentage for the first class is 65% which is equivalent to OGPA of 7.

For absolute grading system based on range of marks, the GPA/OGPA  $\times 10$  will be equal to percentage of marks scored.

### Medium of Instruction

The medium of instruction at the Institute is ENGLISH.

### Honours

Honours is an additional credential, a student may earn in the respective discipline. Honours is not indicative of class. On successful accumulation of credits at the end of the programme this will be mentioned in the Degree Certificate.

### Minor

Minor is an additional credential a student may earn worth of additional learning in a discipline other than his/her discipline of B.Tech degree. The requirements for a particular minor are met within the prescribed minimum time limit for the course. The grade card for minor subject is issued separately.

### Other Abbreviations used

H	Honour Subject
F	Failed In Subject
FT	Failed In Theory
FS	Failed in Sessional
FP	Failed in Practical
AB	Absent in Examination
SP	Special Examination
R	Repeat Examination
NC	Semester Examination Not Cleared
ES	Early Special Examination
UM	Unfairmeans
INC	Incomplete