



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/219800/2024-25/4458

Dated: 14.08.2024

OFFICIAL TRANSCRIPT

TO WHOM IT MAY CONCERN

This is to certify that **Mr/Ms Akshay Ravindra Kargaonkar, Adm.No. 18JE0074**, was a student of this Institute. **He/She** passed **4-years B.Tech (Mechanical Engineering)** Course in the year 2022 with an OGPA/CGPA 8.01. The medium of instruction at this Institute is English.

His/Her duly verified Grade Sheet and Degree Certificate are attached.

(Ranti Dev Sharma)
Dy. Registrar (Academic)
(certificates@iitism.ac.in)

CC: Mr/Ms Akshay Ravindra Kargaonkar,
Adm No 18JE0074,
4-years B.Tech (Mechanical Engineering) for Information.

भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

अभिषद् की अनुशंसा पर
अक्षय रविंद्र कारगांवकर
को
यांत्रिक अभियांत्रिकी में
बैचलर ऑफ टेक्नोलॉजी
की उपाधि



दिनांक 30 मई 2022 को आवश्यक अर्हताओं को सफलतापूर्वक पूर्ण करने एवं अधिकतम 10.00 सी.जी.पी.ए. में से 8.01 सी.जी.पी.ए. अर्जित करने के उपरांत प्रदान करता है।

भारतीय गणराज्य के अंतर्गत धनबाद में आज, दिनांक 28 जून 2022 को संस्थान की यह मुद्रांकित उपाधि दी गई।

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

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

Bachelor of Technology

in

Mechanical Engineering

on

**सत्यापित
VERIFIED**

Akshay
14/8/22

Akshay Ravindra Kargaonkar

who has successfully completed the requirements for the award of this degree on 30 May 2022, obtaining 8.01 C.G.P.A. out of maximum 10.00 C.G.P.A.

Given this day, the 28th day of June, 2022

under the seal of the Institute at Dhanbad in the Republic of India.

R. K. Singh

कुलसचिव
Registrar

R. K. Singh

निदेशक एवं अध्यक्ष, अभिषद्
Director & Chairman,
Senate

R. K. Singh

अध्यक्ष, शासक मंडल
Chairman,
Board of Governors

उप कुलसचिव (शैक्षणिक)
भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद
Deputy Registrar (Academic)
INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD



GRADE SHEET

Name: Akshay Ravindra Kargaonkar

Programme: Bachelor of Technology

Admission No: 18JE0074

Branch: Mechanical Engineering

SESSION YEAR	COURSE CODE	COURSE NAME	CREDIT	GRADE	SGPA	CGPA
2018-2019 MONSOON	EEC11101	ELECTRICAL TECHNOLOGY	7	A+	8.77	8.77
	MCC11102	ENGINEERING GRAPHICS	5	A+		
	MCC11101	ENGINEERING MECHANICS	7	C+		
	AMC11101	MATHEMATICS - I	7	A		
	APC11101	PHYSICS	6	B+		
	ESD11301/GLD11301	EARTH SYSTEM SCIENCE	6	A+		
	HSC11302	INTRODUCTION TO ETHICS AND VALUES	6	A		
	EEC11201	ELECTRICAL TECHNOLOGY PRACTICAL	2	B+		
	APC11201	PHYSICS PRACTICAL	2	A		
2018-2019 WINTER	ACC12101	CHEMISTRY	6	B+	7.88	8.31
	CSC12101	COMPUTER PROGRAMMING	6	B		
	ECC12101	ELECTRONICS ENGINEERING	6	C+		
	HSE12101	ENGLISH FOR SCIENCE & TECHNOLOGY	6	A+		
	AMC12101	MATHEMATICS - II	7	B+		
	MSD12301/APD12301	DISASTER MANAGEMENT & ENERGY RESOURCES	6	B+		
	ACC12201	CHEMISTRY PRACTICAL	2	A		
	CSC12201	COMPUTER PROGRAMMING PRACTICAL	2	B+		
	ECC12201	ELECTRONICS ENGINEERING PRACTICAL	2	A		
	MCC12202	MANUFACTURING PROCESS	5	A		
2019-2020 MONSOON	SWC12701	CO-CURRICULAR ACTIVITIES	3	C		
	MCC13102	ENGINEERING THERMODYNAMICS	7	B+	7.86	8.17
	MCC13103	KINEMATICS OF MACHINES	7	B+		
	MCC13104	MATERIAL SCIENCE AND ENGINEERING	6	B		
	AMR13101	METHODS OF APPLIED MATHEMATICS - I	7	B+		
	MCC13301	MACHINE DRAWING	7	B+		
	MCC13101	SOLID MECHANICS	7	B+		
	MCC13202	ENGINEERING THERMODYNAMICS LAB	1	B		
	MCC13203	KINEMATICS OF MACHINES LAB	1	B+		
	MCC13201	SOLID MECHANICS LAB	1	A		
2019-2020 WINTER	EER16101	APPLIED ELECTRICAL ENGINEERING	6	B	8.93	8.27
	MCC14101	FLUID MECHANICS	7	A		
	MCC14103	MECHANICAL ENGINEERING DESIGN	6	A+		
	AMR14101	NUMERICAL AND STATISTICAL METHODS	7	A		
	MCC14102	PRODUCTION TECHNOLOGY - I	7	A		
	SWC14701	CO-CURRICULAR ACTIVITY-II	0	S		
	MCC14202	AUTOCAD AND SOLID MODELING LAB	1	A+		
	MCC14201	FLUID MECHANICS LAB	1	A+		
	MCC14203	MECHANICAL ENGINEERING DESIGN LAB	3	A+		
	MCC14204	SOFT COMPUTING LAB-I	3	A		
2020-2021 MONSOON	MCC14501	COMPOSITE VIVA-VOCE	2	B+		
	MCC15101	DYNAMICS OF MACHINERY	7	B+	7.56	8.19
	MCC15102	HEAT AND MASS TRANSFER	7	B+		
	MSC15152	INDUSTRIAL ENGINEERING AND MANAGEMENT	6	B		
	MCC15104	MACHINE DESIGN	6	C+		
	MCC15103	PRODUCTION TECHNOLOGY II	7	B		
	MCC15201	DYNAMICS OF MACHINERY LAB	1	A		
	MCC15202	HEAT AND MASS TRANSFER LAB	1	A		
	MCC15204	MACHINE DESIGN LAB	3	A		
	MCC15203	PRODUCTION TECHNOLOGY LAB	1	B+		
	MCC15205	SOFT COMPUTING LAB-II	2	A		

सत्यापित
VERIFIED

DATE: 30-05-2022

14/8/24

VERIFIED

उप कुलसचिव (शैक्षणिक)
भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद
Deputy Registrar (Academic)

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD
DEPUTY REGISTRAR (ACADEMIC)

Page 1 of 2

(कृपया पिछला पृष्ठ देखें / PLEASE SEE OVERLEAF)



GRADE SHEET

Name: Akshay Ravindra Kargaonkar

Programme: Bachelor of Technology

Admission No: 18JE0074

Branch: Mechanical Engineering

SESSION YEAR	COURSE CODE	COURSE NAME	CREDIT	GRADE	SGPA	CGPA
2020-2021 WINTER	MCC16105	ADVANCED SOLID MECHANICS	7	B	7.73	8.15
	MCC16102	CAD & GEOMETRIC MODELING	7	B		
	MCC16101	FLUID MACHINES	7	B+		
	MMC16104	FLUID POWER AND CONTROL	7	B+		
	MCC16103	I C ENGINES	7	B+		
	MCC16202	CAD & GEOMETRIC MODELING LAB	1	B		
	MCC16201	FLUID MACHINES LAB	1	B+		
	MMC16204	FLUID POWER AND CONTROL LAB	1	A		
	MCC16203	I C ENGINES LAB	1	A		
	MCC16501	COMPOSITE VIVA-VOCE	2	A		
2021-2022 MONSOON	MCE17102	FINITE ELEMENT ANALYSIS	6	B+	8.15	8.15
	MCC17102	MEASUREMENT AND CONTROL	7	B		
	MSR17153	OPERATIONS RESEARCH	6	B		
	MCE17107	RAPID PROTOTYPING	6	A		
	MCC17101	REFRIGERATION AND AIR CONDITIONING	7	B+		
	MCC17202	MEASUREMENT AND CONTROL LAB	1	B+		
	MCC17201	REFRIGERATION AND AIR CONDITIONING LAB	1	A		
	MCC17801	PROJECT AND SEMINAR	6	A+		
2021-2022 WINTER	MMC18103	AUTOMOBILE ENGINEERING	7	B+	7.34	8.01
	MED529	COMPOSITE MATERIALS	6	B+		
	MEC306	COMPUTER AIDED MANUFACTURING	9	A		
	MCC18102	ENERGY CONVERSION EQUIPMENT	7	C+		
	MED528	ROBOTICS	6	C+		
	MCC18201	COMPUTER AIDED MANUFACTURING LAB	1	B		
	MCC18202	ENERGY CONVERSION EQUIPMENT LAB	1	A		
	MCC18501	COMPREHENSIVE VIVA-VOCE	4	C+		
	MCC18801	PROJECT AND SEMINAR	6	B		

Abbreviations: Extra Paper (E), Minor (M), Second Major (S), Dual Degree (D), Alternate Paper (*), Honor Paper (H)

SUMMARY -

CUMM HR : 272.5

CUMM POINTS : 2182.5

OGPA : 8.01

STUDENT COMPLETED THE PROGRAMME ON 30 May 2022

Due to COVID-19 pandemic, the weightage of examination from Winter(2019-2020) to Monsoon(2021-2022) is reduced to 50% for final CGPA/OGPA calculation.

सत्यापित
VERIFIED

14/8/24



DATE: 30-05-2022

VERIFIED

Page 2 of 2

उप कुलसचिव (शैक्षणिक)
भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद
Deputy Registrar (Academic)
INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD

DEPUTY REGISTRAR (ACADEMIC)

(कृपया पिछला पृष्ठ देखें / PLEASE SEE OVERLEAF)

EXPLANATION AND CALCULATION

Award of Grades

The students are awarded a letter grade in each course by the concerned course coordinator/instructor taking into consideration their performance in various examinations, quizzes, assignments, laboratory work (if any), etc., and their regularity of attendance in classes (if applicable). The grades will be assigned on the basis of total marks obtained in a course.

There are ten letter grades. The letter grades, their descriptions, and the numerical equivalents on a 10-point scale (called Grade Points) are as follows:

CREDIT BASED SYSTEM (CBS)

Grade	Grade Point (Numerical Value)	Performance
A+	10	Outstanding
A	9	Excellent
B+	8	Very Good
B	7	Good
C+	6	Above Average
C	5	Average
D	4	Pass
F	0	Fail
S	NA	Satisfactory
X	NA	Unsatisfactory

In general, the following formulae may be employed to calculate the credits of a course where C is the number of credits, L is the number of lectures hours, T is the number of tutorial hours and P is the number of laboratory/practical hours per week* in a course:

- For courses with a course code of eight characters:
Credits (C) = 2L + T + P
- For courses with a course code of six characters:
Credits (C) = 3L + 2T + P

*No. of hours may also change on a course to course basis.

Semester Grade Point Average (SGPA)

The following formula is used for calculating the Semester Grade Point Average (SGPA):

$$SGPA = \frac{TCP}{TC} = \frac{G_1C_1 + G_2C_2 + G_3C_3 + \dots}{C_1 + C_2 + C_3 + \dots}$$

Where, G_1, G_2 etc. are the Grade Points obtained in the specified courses and C_1, C_2 etc. are the Credits of the respective courses. TCP stands for the Total Credit Points earned in a semester and TC stands for the Total Credits earned in a semester. Semester Grade Point Average (SGPA) will be calculated up to 2 places of decimal. Credits of the S and X graded courses are not counted in the calculation of the SGPA.

Cumulative Grade Point Average (CGPA)

The Cumulative Grade Point Average (CGPA) indicates the cumulative academic performance of a student. It is calculated in the same manner as the SGPA, except that all the courses registered up to and including the latest completed semester are considered in the calculation of CGPA.

The CGPA at the end of the second semester and thereafter until the program is completed shall be calculated as indicated below:

$$CGPA = \frac{TCP_1 + TCP_2 + TCP_3 + \dots}{TC_1 + TC_2 + TC_3 + \dots} = \frac{\sum_{i=1}^n TCP_i}{\sum_{i=1}^n TC_i}$$

Where, TCP_1, TCP_2 etc. are the Total Credit Points for the specified semester and TC_1, TC_2 etc. are the Total Credits of the respective semester. 'i' is the number of the respective semester.

Whenever a student is allowed to repeat or substitute a course and a new letter grade is awarded for that course, the new letter grade will be substituted for the old letter grade in the calculation of the CGPA. However, both the Grades shall be mentioned in the Grade Sheet. If the credits of a substituted or a repeated course are more or changed, only the new credits will be used in the calculation of the CGPA. Even in the case where there is no change in credits, they will be counted only once in the calculation of CGPA.

An abbreviation R is used with a course if it is repeated by the student and S is used if the course has been substituted for another course.

The CGPA awarded upon completion of the program is called OGPA (Overall Grade Point Average).

Distinction is awarded to candidates with OGPA \geq 8.5 for Undergraduate Programs and OGPA \geq 9 for Postgraduate Programs.

Conversion of OGPA to Percentage

The graduating OGPA multiplied by 10 will give the graduation marks in percentage.

Medium of Instruction

The Medium of Instruction at the Institute is **ENGLISH**.