

क्रम संख्या  
Serial No. 40132

अनुक्रमांक  
Roll No. 2K15/CE/63



# दिल्ली प्रौद्योगिकी विश्वविद्यालय DELHI TECHNOLOGICAL UNIVERSITY




**बैचलर ऑफ टेक्नोलॉजी**  
विश्वविद्यालय की शैक्षणिक परिषद की अनुमति पर

**मनिष कुमार साह**  
को सिविल इंजीनियरिंग में बैचलर ऑफ टेक्नोलॉजी

की उपाधि प्रदान की जाती है, जिन्होंने इस उपाधि को प्रदान किए जाने हेतु विश्वविद्यालय के अध्यादेशों के तहत निर्धारित अपेक्षाओं को वर्ष 2019 में 10 अंकीय गणकम पर 8.13 संवर्षी कोटि अंक माध्य (सी.जी.पी.ए.) के साथ सफलतापूर्वक पूर्ण कर लिया है। इन्हें उक्त उपाधि से षष्ठम् दीक्षान्त समारोह में 13 दिसंबर 2019 को विभूषित किया गया।

**BACHELOR OF TECHNOLOGY**  
*Upon the recommendation of the Academic Council of the University*  
**MANISH KUMAR SAH**  
is awarded the degree of  
**Bachelor of Technology in Civil Engineering**  
who has successfully completed the requirements prescribed under the ordinances of the University for the award of this degree with a Cumulative Grade Point Average (CGPA) of 8.13 on a 10 point scale in the year 2019.  
He/She is admitted to the said degree at the 6<sup>th</sup> Convocation held on December 13, 2019.

  
**परीक्षा नियंत्रक**  
*Controller of Examination*

**दिल्ली, (भारत) दिनांक**  
*Delli, (India) dated the*

**December 13, 2019**  
**कुलपति**  
*Vice-Chancellor*



## DELHI TECHNOLOGICAL UNIVERSITY

(Formerly Delhi College of Engineering)

S. No. 263410

**Consolidated Grade Report**  
**BACHELOR OF TECHNOLOGY**  
**CIVIL ENGINEERING**

Name : MANISH KUMAR SAH Roll No. 2K15/CE/63

Course Code	Course Title	C	G	Course Code	Course Title	C	G
<b>Semester : I</b> SGPA : 7.43				<b>Semester : II</b> SGPA : 7.71			
MA101	MATHEMATICS - I	4	B+	MA102	MATHEMATICS - II	4	A+
AP101	PHYSICS - I	4	A+	AP102	PHYSICS - II	4	A+
AC101	CHEMISTRY	4	A+	EE102	BASIC ELECTRICAL ENGINEERING	4	B+
ME101	BASIC MECHANICAL ENGINEERING	4	A	CO102	PROGRAMMING FUNDAMENTALS	4	B+
ME103	WORKSHOP PRACTICE	2	B+	ML102	ENGINEERING GRAPHICS	2	A
HU101	COMMUNICATION SKILLS	3	B	EN102	INTRODUCTION TO ENVIRONMENTAL SCIENCE	3	B
<b>Semester : III</b> SGPA : 8.35				<b>Semester : IV</b> SGPA : 8.57			
EC201	BASIC ELECTRONICS & INSTRUMENTATION	4	O	EN202	ENVIRONMENTAL ENGINEERING	4	B+
CE201	CIVIL ENGINEERING BASICS AND APPLICATIONS	4	A	CE202	MECHANICS OF SOLIDS	4	O
CE203	ENGINEERING MECHANICS	4	O	CE204	ENGINEERING SURVEY	4	A
CE205	FLUID MECHANICS	4	A	CE206	SOIL MECHANICS	4	A+
CE207	ENGINEERING ANALYSIS AND DESIGN	4	A	CE208	HYDRAULICS & HYDRAULIC MACHINES	4	O
MC203	FUNDAMENTALS OF MANAGEMENT	3	A	HU202	ENGINEERING ECONOMICS	3	B+
<b>Semester : V</b> SGPA : 8.00				<b>Semester : VI</b> SGPA : 8.08			
CE301	ANALYSIS OF DETERMINATE STRUCTURES	4	A+	CE302	ANALYSIS OF INDETERMINATE STRUCTURES	4	A
CE303	DESIGN OF RCC STRUCTURES	4	A+	CE304	GEOTECHNICAL ENGINEERING	4	B+
CE317	SOLID WASTE MANAGEMENT AND AIR POLLUTION	4	A	CE306	TRANSPORTATION ENGINEERING	4	A
CE319	APPLICATION OF GEOMATICS REMOTE SENSING AND GIS IN ENGINEERING	4	A	CE322	TRAFFIC AND TRANSPORTATION PLANNING	4	A
PE303	SUPPLY CHAIN MANAGEMENT	4	A	CE310	GEOTECHNICAL PROCESSES	4	A+
HU301	TECHNICAL COMMUNICATION	2	B+	HU304	PROFESSIONAL ETHICS AND HUMAN VALUES	2	A
<b>Semester : VII</b> SGPA : 8.31				<b>Semester : VIII</b> SGPA : 8.08			
CE401	B.TECH. PROJECT - I	4	A+	CE402	B.TECH. PROJECT - II	4	A
CE403	TRAINING SEMINAR	2	A	CE404	CONSTRUCTION TECHNOLOGY & MANAGEMENT	4	A
CE405	DESIGN OF STEEL STRUCTURES	4	A	MOOC402*	ADVANCED ENGINEERING SYSTEMS IN MOTION	2	A+
CE407	WATER RESOURCES ENGINEERING	4	O	MOOC403*	DYNAMICS OF THREE DIMENSIONAL (3D) MOTION (COURSEWARE)	4	B+
MOOC401*	ENGINEERING SYSTEM IN MOTION: DYNAMICS OF 2D PARTICLES AND BODIES IN 2D MOTION (COURSEWARE)	2	A+	MOOC404*	FOOD TECHNOLOGY	4	A+
AE413	VEHICLE TRANSPORT MANAGEMENT	4	A+	MOOC405*	TERRORISM AND COUNTERTERRORISM	2	A+
MOOC402*	DISASTER PREPAREDNESS (COURSEWARE)	2	A+	MOOC406*	COMPARING THEORY AND PRACTICE (COURSEWARE)	2	A+

**CREDITS EARNED/TOTAL CREDITS : 173/173**  
'C' indicates Course Credits earned 'G' indicates Grades obtained.  
 \* Course pursued under Massive Open Online Courses (MOOC).

**CGPA : 8.13**  
**RESULT : PASSED**

**Dated: December 04, 2019**  
**Date of Declaration of Result: 05/09/2019**

  
**CONTROLLER OF EXAMINATIONS**



Subject: Official Transcripts of Mr./Ms. Manish Kumar Sah, (2K15/CE/063)

Dear Sir/ Madam,

I am enclosing the attested photocopies of the official transcripts of **Mr./Ms. Manish Kumar Sah**, who completed his/her Bachelor of Technology, **Civil Engineering** during the period of 2015-2019 from Delhi Technological University.

Under the University regulations, the Bachelor of Technology (B. Tech) is a four-year course comprising of 8 semesters with 2 semesters per year. The credits for the courses in which a student has obtained 'P' (minimum passing grade for a course) grade or higher shall be counted as Credit earned by him/her. A student who has earned 173 credits as specified in the UG curriculum, is eligible for the award of the B. Tech. degree.

The academic performance of a student is graded on 10-point as per the guidelines given in **Table-I**. The letter grades and their equivalent grade points are also given in list in **Table-I**.

The letter grades awarded to a student in all the courses shall be converted into a semester and cumulative performance index called the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA), to be calculated by the procedure given as below.

$$S.G.P.A = \frac{\sum_{i=1}^n C_i \times P_i}{\sum_{i=1}^n C_i}$$

Where,

C<sub>i</sub> = Number of Credits of the <sup>i</sup>th course of a semester for which SGPA is to be calculated

P<sub>i</sub> = Grade Point obtained in <sup>i</sup>th course

i = 1, 2, 3, ..., n, represent the number of course in which a student is registered in the concerned semester.

$$C.G.P.A = \frac{\sum_{i=1}^n C_i \times P_i}{\sum_{i=1}^n C_i}$$

Where,

C<sub>i</sub> = Number of Credits of the <sup>i</sup>th course of a semester.

P<sub>i</sub> = Grade Point obtained in <sup>i</sup>th course. A grade lower than 'P' (i.e. grade point < 4) in a course shall not be taken into account.

i = 1, 2, 3, ..., n, represent the number of course in which a student was registered and obtained a grade not lower than 'D' upto that semester for which CGPA is to be calculated.

At the end of the program, a student with CGPA of 8.0 and above shall be awarded 'First Division with Distinction' and a student with CGPA between 6.0 and 8.0 shall be awarded 'First Division'.

**Statistical Method for the Award of Grades (for Courses in which number of students is more than 30)**

For the award of grades in a course, all component-wise evolution shall be done in marks. The marks of different components viz. Mid Term Examination (MTE), End Term Examination (ETE), Class Work Sessionals (CWS) and Practical Sessionals (PRS) would be reduced to relative weights of each components as approved by the Academic Council and added. Marks so obtained shall be out of 100 and the same would be converted to grades using following guidelines.

$$Z = \frac{X - \bar{X}}{\sigma}$$

Where,

X is actual marks obtained,  $\bar{X}$  is mean of marks and  $\sigma$  is standard deviation.

The grade boundaries are left to the discretion of Moderation Committee. However, a minimum of 'P' grade will be awarded if the student scores more than 34 marks in aggregate in a course. The grade boundaries with 'Z' variant are mentioned in the Table-I below.

SHAHAD DAULATPUR, BAWANA ROAD, DELHI-110042, INDIA

Page 1 of 2

Ph. : 011-27871018, 27871022, 43, 44, 45, Fax: +91-11-27871023, WEBSITE : www.dtu.ac.in

Table-I

Statistical Method for the Award of Grades (for Courses in which number of students is, more than 30)				Grades Based on Absolute Marks System (For Courses in which number of students is less than or equal to 30)	
Lower Range of Z	Grade	Grade Point	Remarks	Upper Range of Z	
>1.5	O	10	Outstanding	—	91 & ≤ 100
>1.0	A+	9	Excellent	≤1.5	82 & ≤ 90
>0.5	A	8	Very good	≤1.0	73 & ≤ 81
>0.0	B+	7	Good	≤0.5	64 & ≤ 72
>-0.5	B	6	Above Average	≤0.0	55 & ≤ 63
>-1.0	C	5	Average	≤-0.5	46 & ≤ 54
>-1.5	P	4	Pass	≤-1.0	35 & ≤ 45
—	F	0	Fail	≤-1.5	<34
—	I	—	Incomplete	—	—

It is further certified that the medium of instruction in this University is English only. The attested copies of Statements of Grades for Semester (I-VIII), Consolidated Report Grade are enclosed. I welcome any clarifications regarding this matter.

Delhi College of Engineering (DCE) which was affiliated to University of Delhi is approved by All India Council of Technical Education, Ministry of Human Resources and Development, Govt. Of India, New Delhi India and upgraded to Delhi Technological University (DTU) vide Delhi Act 06 of 2009 notified vide State Government Gazette No. F. 6/17/2008 Judd/Supt Law/1264-1269 dated 10/07/2009 by Government of National Capital Territory of Delhi, India. DTU is approved under Section 12(B) of the UGC Act, 1956 of University Grants Commission, Govt. of India as per the decision of the Commission (Item No. 5.02) dated 17th December, 2012.

Yours truly,

(Prof. Madhusudan Singh)  
Dean Academic (UG)