



MANIPAL INSTITUTE OF TECHNOLOGY

MANIPAL

(A constituent unit of MAHE, Manipal)

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Sl. No.: **Nº 016943**
Ref.: **1579/21**

OFFICIAL TRANSCRIPT

(From College Records)

Name : **VIBHU RAMAN BATHEJA**
Reg No. : **170904136**
Degree : **Bachelor of Technology (B.Tech.)**
Civil Engineering

Date : **10 Aug 2021**

Year of Admission : **July 2017**

Year of Completion : **July 2021**

| FIRST SEMESTER | | | |
|----------------|---------------------------------|-----------|-------|
| Subject | Subject Title | Credit(s) | Grade |
| CIE 1001 | MECHANICS OF SOLIDS | 3 | E |
| ECE 1001 | BASIC ELECTRONICS | 3 | E |
| HUM 1001 | COMMUNICATION SKILLS IN ENGLISH | 3 | E |
| MAT 1101 | ENGINEERING MATHEMATICS - I | 4 | D |
| MME 1001 | BASIC MECHANICAL ENGINEERING | 3 | E |
| MME 1011 | WORKSHOP PRACTICE | 1 | C |
| MME 1111 | ENGINEERING GRAPHICS - I | 1 | D |
| PHY 1001 | ENGINEERING PHYSICS | 3 | E |
| PHY 1011 | ENGINEERING PHYSICS LAB | 1 | B |

Credit Earned : 22 GPA : 5.45

| THIRD SEMESTER | | | |
|----------------|---------------------------------|-----------|-------|
| Subject | Subject Title | Credit(s) | Grade |
| CIE 2101 | FLUID MECHANICS | 4 | A |
| CIE 2102 | MECHANICS OF STRUCTURE | 4 | B |
| CIE 2103 | BUILDING SCIENCE AND TECHNOLOGY | 4 | B |
| CIE 2104 | BASICS OF SURVEYING | 3 | A |
| CIE 2105 | ENGINEERING GEOLOGY | 3 | A |
| CIE 2111 | BUILDING DESIGN AND DRAWING | 1 | C |
| CIE 2112 | MATERIAL TESTING LAB - I | 1 | D |
| MAT 2104 | ENGINEERING MATHEMATICS III | 3 | B |

Credit Earned : 23 GPA : 8.30

| FIFTH SEMESTER | | | |
|----------------|------------------------------------|-----------|-------|
| Subject | Subject Title | Credit(s) | Grade |
| CIE 3101 | GEOTECHNICAL ENGINEERING | 4 | A |
| CIE 3102 | BASIC STRUCTURAL STEEL DESIGN | 4 | B |
| CIE 3103 | WATER SUPPLY ENGINEERING | 3 | B |
| CIE 3104 | HIGHWAY ENGINEERING | 3 | B |
| CIE 3105 | ELEMENTS OF EARTHQUAKE ENGINEERING | 3 | B |
| CIE 3111 | SOIL MECHANICS LAB | 1 | C |
| CIE 3112 | FLUID MECHANICS LAB | 1 | D |
| CIE 4017 | AIR POLLUTION AND CONTROL | 3 | C |

Credit Earned : 22 GPA : 7.91

| SEVENTH SEMESTER | | | |
|------------------|--|-----------|-------|
| Subject | Subject Title | Credit(s) | Grade |
| CIE 4101 | ESTIMATING AND CONSTRUCTION MANAGEMENT | 4 | A+ |
| CIE 4102 | RAILWAY AND AIRPORT ENGINEERING | 3 | A |
| CIE 4111 | COMPUTER AIDED ANALYSIS AND DESIGN LAB | 1 | A+ |
| CIE 4112 | ENVIRONMENTAL ENGINEERING LAB | 1 | A+ |
| CIE 4113 | ESTIMATION AND COSTING PRACTICE | 1 | C |
| HUM 4001 | ESSENTIALS OF MANAGEMENT | 3 | A |
| CIE 4015 | FINITE ELEMENT METHOD OF ANALYSIS | 3 | A+ |
| CIE 4016 | PRE-STRESSED CONCRETE DESIGN | 3 | A+ |
| CIE 4021 | ENVIRONMENTAL IMPACT ASSESSMENT AND AUDITING | 3 | A+ |

Credit Earned : 22 GPA : 9.59

| SECOND SEMESTER | | | |
|-----------------|---------------------------------|-----------|-------|
| Subject | Subject Title | Credit(s) | Grade |
| BIO 1001 | BIOLOGY FOR ENGINEERS | 3 | A |
| CHM 1001 | ENGINEERING CHEMISTRY | 3 | A |
| CHM 1011 | ENGINEERING CHEMISTRY LAB | 1 | D |
| CIE 1002 | ENVIRONMENTAL STUDIES | 3 | A |
| CSE 1001 | PROBLEM SOLVING USING COMPUTERS | 3 | A |
| CSE 1011 | PSUC LAB | 1 | B |
| ELE 1001 | BASIC ELECTRICAL TECHNOLOGY | 3 | D |
| MAT 1201 | ENGINEERING MATHEMATICS - II | 4 | C |
| MME 1211 | ENGINEERING GRAPHICS - II | 1 | E |

Credit Earned : 22 GPA : 7.86

| FOURTH SEMESTER | | | |
|-----------------|--------------------------------------|-----------|-------|
| Subject | Subject Title | Credit(s) | Grade |
| CIE 2201 | WATER RESOURCES ENGINEERING | 4 | B |
| CIE 2202 | ANALYSIS OF INDETERMINATE STRUCTURES | 4 | A |
| CIE 2203 | BASIC REINFORCED CONCRETE DESIGN | 4 | A |
| CIE 2204 | APPLIED SURVEYING | 3 | D |
| CIE 2211 | SURVEYING PRACTICE - I | 1 | B |
| CIE 2212 | GEOLOGY LAB | 1 | D |
| MAT 2205 | ENGINEERING MATHEMATICS - IV | 3 | C |
| CSE 3292 | OPEN ELECTIVE - PYTHON PROGRAMMING | 3 | B |

Credit Earned : 23 GPA : 7.87

| SIXTH SEMESTER | | | |
|----------------|--|-----------|-------|
| Subject | Subject Title | Credit(s) | Grade |
| CIE 3201 | APPLIED SOIL ENGINEERING | 3 | A |
| CIE 3202 | WASTE WATER MANAGEMENT | 3 | A |
| CIE 3211 | STRUCTURAL DESIGN AND DRAWING | 2 | C |
| CIE 3212 | MATERIAL TESTING LAB - II | 1 | A |
| CIE 3213 | SURVEYING PRACTICE - II | 1 | B |
| HUM 4002 | ENGINEERING ECONOMICS AND FINANCIAL MANAGEMENT | 3 | A |
| CIE 4013 | ADVANCED DESIGN OF STEEL STRUCTURES | 3 | A |
| CIE 4014 | ADVANCED REINFORCED CONCRETE DESIGN | 3 | C |
| CSE 3281 | DATABASE MANAGEMENT SYSTEMS | 3 | A+ |

Credit Earned : 22 GPA : 8.64

| EIGHT SEMESTER | | | |
|----------------|--------------------------------|-----------|-------|
| Subject | Subject Title | Credit(s) | Grade |
| CIE 4297 | SEMINAR | 1 | B |
| CIE 4298 | INDUSTRIAL TRAINING | 1 | A+ |
| CIE 4299 | PROJECT WORK / PRACTICE SCHOOL | 12 | A+ |

Credit Earned : 14 GPA : 9.86

MINOR SPECIALIZATION : STRUCTURAL ENGINEERING

Note : The above student has completed all the requirements of the 8 semesters programme and eligible for Bachelors Degree.

Total Credits : 170

CGPA : 8.11

ASSOCIATE DIRECTOR (A)

Associate Director (Academic)
MANIPAL INSTITUTE OF TECHNOLOGY
Manipal - 576 104



[Signature]

DIRECTOR

Manipal Institute of Technology
MANIPAL - 576 104

Manipal Institute of Technology, Manipal

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This transcript contains the complete academic record of the student

ACADEMIC PROCESS

The University follows semester system of 16 weeks duration with continuous and comprehensive assessment. Each semester of study has minimum requirements of number of course credits that must be taken. The first year B.Tech course of study is common to all branches of Engineering.

The medium of instruction and exam for all courses offered by the institute is English.

Duration of the Course is 8 Semesters for B.Tech and 4 Semesters for M.Tech / MCA.

The entire eighth semester for B.Tech course, fourth semester for MCA as well as third and fourth semesters for M Tech are for project work.

COURSE NUMBERING SYSTEM

The courses offered by each Department are coded with 3 letters indicating the department offering the same. The following codes are used for the different departments:

| DEPARTMENT | CODE |
|---|---------|
| Aeronautical and Automobile Engineering | AAE |
| Bio-medical Engineering | BME |
| Bio-Technology | BIO |
| Chemical Engineering | CHE |
| Civil Engineering | CIV |
| Computer Science and Engineering | CSE |
| Electronics and Communication Engineering | ECE |
| Electrical and Electronics Engineering | ELE |
| Information and Communication Technology | ICT |
| Instrumentation and Control Engineering | ICE |
| Mechanical and Manufacturing Engineering | MME |
| Mechatronics | MTE |
| Print and Media Engineering | PMT |
| Physics | PHY |
| Chemistry | CHM |
| Mathematics | MAT |
| Humanities and Management | HUM/HSS |
| Computer Applications | MCA/DCA |

The Department code is followed by 4 digits and the last two digits indicate the subject code.

CREDIT BASED SYSTEM

Each course, theory as well as practical, is expressed in terms of a certain number of credits. The credits are determined by the number of contact hours per week. For theory courses, 1 Hour Lecture / Tutorial per week

is assigned 1 Credit where as for practical courses 3 contact hours per week is assigned 1 Credit.

GRADING SYSTEM

10 point grading system is used to award the student an overall letter grade for the course as shown below:

| Letter Grade | A+ | A | B | C | D | E | AP | F/I/DT |
|--|----|---|---|---|---|---|----|--------|
| Grade Points | 10 | 9 | 8 | 7 | 6 | 5 | 0 | 0 |
| AP : Audit Pass Grade F : Failure I : Incomplete DT : Not permitted to appear for exams due to lack of attendance | | | | | | | | |

The overall performance of a student in each semester is indicated by the Grade Point Average (GPA) which is the weighted average of the grade points expressed as

$$GPA = \frac{\sum_{i=1}^n C_i G_i}{\sum_{i=1}^n C_i}$$

where n = Number of courses registered

C = Course credits

G = Grade points

The overall performance of the student for the entire programme is indicated by the Cumulative Grade Point Average (CGPA) which is the weighted average of the GPA of all semesters expressed as

$$CGPA = \frac{\sum_{j=1}^N GPA_j (\sum_{i=1}^n C_i)_j}{\sum_{j=1}^N (\sum_{i=1}^n C_i)_j}$$

where N = Number of Semesters

ELIGIBILITY FOR THE AWARD OF DEGREE

A student completes the requirements for graduation when he/she earns the required number of credits specified for all semesters which make up the course

Total no. of credits required for obtaining:

B.Tech - 170

M.Tech - 75

MCA - 80

Minimum CGPA for Graduation is 5.0 and the Maximum CGPA that can be earned is 10

LATERAL ENTRY TO SECOND YEAR

Holders of three years Diploma in Engineering awarded by the Board of Technical Education in Karnataka or equivalent, or BSc Degree with Mathematics as one of the subjects are eligible to join THIRD Semester under lateral entry scheme