

Part-time Degree Courses

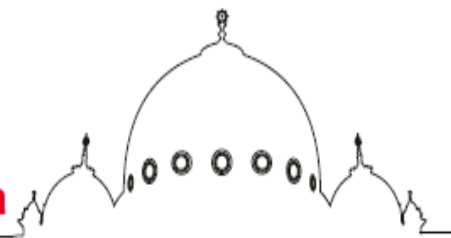


Engineering @ its finest with your job

Dr. P. T. Deota
Deputy Director

Prof. C. N. Murthy
Dean & Director

**Faculty of Technology and Engineering,
The Maharaja Sayajirao University of Baroda,
Vadodara-390001 (Gujarat) INDIA**



About the University



The M.S. University of Baroda is one of the oldest and largest Universities in India. It is attracting more than 40,000 students to its various faculties. Founded as Baroda College in 1879 by Maharaja Sayajirao Gaekwad-III as a college of Arts, the M.S. University came into existence in 1949 by combining all the independent then autonomous colleges in Baroda. Many brilliant scholars and renowned writers of the country have taught or graduated from this University. They included personalities like Shri Aurobindo, Shri Vinoba Bhave,

Shri K.M. Munshi, Shri R.V. Desai, Shri I.G. Patel, Smt. Hansa Mehta, Shri Ambedkar, Shri Sam Pitroda and the Nobel laureate Dr. Ramakrishnan Venkatraman.

The University which started in 1949 with 8 faculties, two colleges and about 3500 students have grown tremendously over these years to 13 faculties (Arts, Commerce, Science, Education and Psychology, Law, Fine Arts, Performing Arts, Family & Community Sciences, Social Work, Management Studies, Journalism & Communication, Technology & Engineering), six colleges and a Polytechnic together having a total of 86 departments and a student population of more than 35,000. It is the only English medium University in the state of Gujarat, with a unitary and residential status.

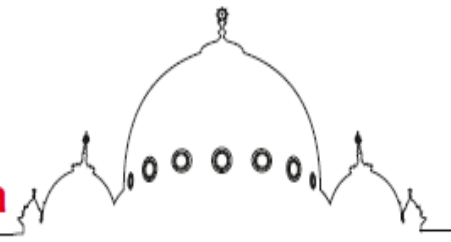
About the Faculty

The Faculty of Technology and Engineering as it stands today formed along with the establishment of the Maharaja Sayajirao University in 1949 is an outgrowth of what was popularly known as the Kala Bhavan Technical Institute (KBTI) established in June 1890 by late His Highness the Maharaja Sayajirao Gaekwad III of Baroda state. In May 1990, it completed hundred years of glorious services for the cause of technical education.

The academic growth resulted in the creation of 15 departments, a Workshop, a Library and several buildings which were possible due to the financial support from various government organizations like UGC, MHRD, DST, AICTE and financial aid from UNDP, USAID, etc. and due to the dedicated efforts by the Institute, Deans and Teachers of the Institute. The reputed Faculty members leave profound influence by demonstrating their expertise at the major

national / international conferences, seminars and refresher courses that helps to shape the future trends in technical education. Our Alumni have performed excellently in higher education and on challenging jobs not only in India but abroad (particularly USA) also and have achieved key positions. Thus, it has taken more than a century dedicated efforts of a few pioneers and visionaries to raise the old Kala Bhavan to the stature of a mighty technical institute in the forefront of technical education in the service of the Nation.





Programme Offered

Four Year (Eight Semesters) Part Time Bachelor Degree Courses are offered in **Civil, Mechanical, Electrical, and Chemical Engineering.**

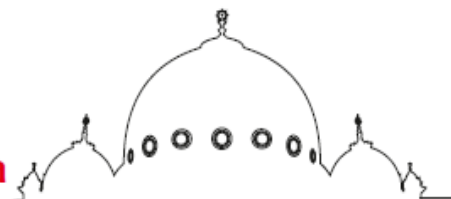
Seats available

Civil Engineering	:	56
Mechanical Engineering	:	75
Electrical Engineering	:	56
Chemical Engineering	:	37

(All seats are including EWS category)

Timing of the classes

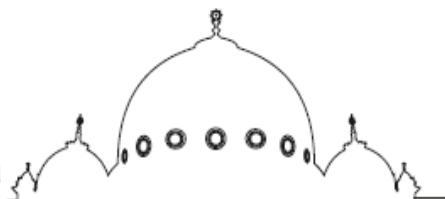
The classes are conducted on all working days during **6.00 p.m. to 9.00 p.m.**



Scheme of Subjects

Civil Engineering (Eight Semesters Course)

Subjects	Subjects
First Semester of BE-I	Second Semester of BE-I
Applied Physics I	Bedg. Planning & Drawing
Fundamental Civil Engg.	Mathematics II
Mathematics I	Construction Technology I
Applied Chemistry	Advances Surveying
First Semester of BE-II	Second Semester of BE-II
Mathematics III	Fluid Mechanics II
Construction Technology II	Theory of Structures & Structures Design
Fluid Mechanics I	Elements of Fortran Program with Numerical Applications
Applied Mechanics & Material Structure	Engineering Geology
First Semester of BE-III	Second Semester of BE-III
Structural Design II	Estimation Valuation & Professional Practice
Transportation Engineering I	Ground Water Hydraulics
Theory of Structure II	Environmental Engineering I
Engineering Hydrology	Geotech Engineering I
First Semester of BE-IV	Second Semester of BE-IV
Geotech Engineering II	Construction Planning & Management
Environmental Engineering II	Irrigation Engineering
Water Resource Engineering	Transportation Engineering II
Elective I	Structural Design III
A1. Matrix Analysis of formed structures	Elective II
B1. Cement & Concrete Technology	A2. Advanced Program with Engineering Applications
C1. Bituminous Road & Construction	B2. Pre-stressed Concrete
D1. Files Diaph. & Arch.	C2. Pavement Design and Evaluation
E1. Canal Engineering	D2. Computer Applications to Foundation Structures
F1. Air Pollution	E2. Storage and Hydropower Structures
	F2. Adv. Water Supply Engineering

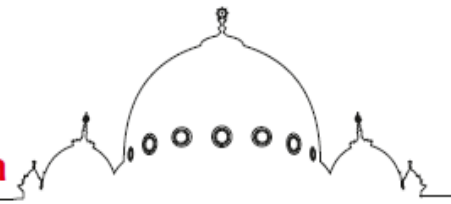


Scheme of Subjects

Mechanical Engineering (Eight Semesters Course)

Subjects	Subjects
First Semester of BE-I	Second Semester of BE-I
Applied Physics I	Applied Mathematics II
Applied Mathematics I	Materials and Structures
Material Science	Dynamics of Machine I
Thermal Engineering I	Electrical Engineering
First Semester of BE-II	Second Semester of BE-II
Applied Mathematics III	Electronics
Production Technology I	Machine Design I
Dynamics of Machine II	Fluid Mechanics and Fluid Machines
Thermal Engineering II	Alternative Energy Sources
First Semester of BE-III	Second Semester of BE-III
Machine Design II	Mechanical Measurements
Heat and Mass Transfer	Thermal Engineering III
Industrial Engineering I	Production Technology II
Computer Techniques and Prog. Languages	Industrial Engineering II
First Semester of BE-IV	Second Semester of BE-IV
Dynamics of Comp. Flow	Turbomachines
Industrial Management	Oper. Research and Opt. Tech.
Value Engineering	Production Design & Process Engineering
Elective I	Elective II
A1. Alternative Energy Sources I	A2. Alternative Energy Sources II
B1. Power Engineering I	B2. Power Engineering II
C1. Automobile Engineering I	C2. Automobile Engineering II



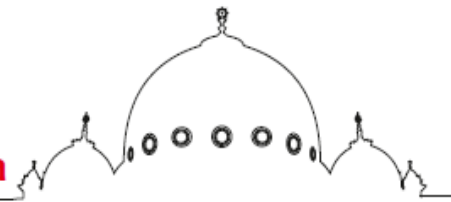


Scheme of Subjects

Electrical Engineering (Eight Semesters Course)

Subjects	Subjects
First Semester of BE-I	Second Semester of BE-I
Applied Physics I	Applied Mathematics II
Applied Mathematics I	Applied Physics II
Thermodynamics	Power Plant Engineering
Basic Electrical Technology	Electrical Machine I
First Semester of BE-II	Second Semester of BE-II
Applied Mathematics III	Applied Mathematics IV
Elements of Power System	Circuit Analysis
Basic Electronic Circuit	Electronic and Commu. Circuit
Electrical Machine II	Electrical Measurements and Instrument I
First Semester of BE-III	Second Semester of BE-III
Computational Techniques	Control System Engineering
Digital Circuits	Electrical Machine III
Electrical Measurements and Instrument II	Microprocessors
Power System Analysis	Power Electronics
First Semester of BE-IV	Second Semester of BE-IV
Advance Micro Processor	Power System- Switchgear
Electrical Machine Design	Power System - Protection
High Voltage Technology	Utilization of Electrical Engineering
Power System Operation and Control	Elective I : Adv. Electrical Machines
	Elective II : Advanced Instrumentation



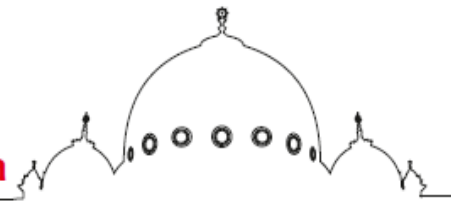


Scheme of Subjects

Chemical Engineering (Eight Semesters Course)

Subjects	Subjects
First Semester of BE-I	Second Semester of BE-I
Applied Physics I	Applied Mathematics II
Applied Mathematics I	Applied Chemistry – II
Chemical Engineering Materials	Communication Skill
Applied Chemistry - I	Process Calculation
First Semester of BE-II	Second Semester of BE-II
Chemical Engineering Computation	Chemical Engineering Thermodynamics
Engineering Thermodynamics	Chemical Process Industries
Mechanical Operation	Fluid Flow Operation
Applied Mathematics - III	Mass Transfer Operation – I
First Semester of BE-III	Second Semester of BE-III
Chemical Reaction Engineering – I	Chemical Reaction Engineering – II
Mass Transfer Operation – II	Heat Transfer Operation
Petrochemical Technology	Polymer Technology and Processing
Petroleum Refining Engineering	Process Plant Utilities
First Semester of BE-IV	Second Semester of BE-IV
Process Equipment Design	Plant Economics
Process Instrumentation and Control	Process Plant Operation
Safety, Health and Environment	Project
Seminar	Virtual Industrial Training
Elective – I	Elective - II
A1 – Advance Separation Processes	A2 – Green Technology
B1 – Environmental Technology	B2 – Rubber Technology
C1 – Industrial Catalysis	C2 – Nano Technology



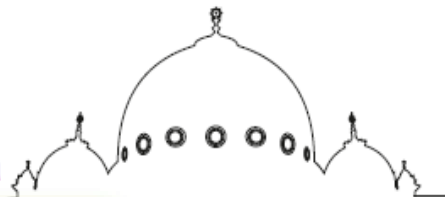


Requirement of Eligibility

- 1) Candidates having passed the diploma in Civil, Mechanical, Electrical, and Chemical Engineering (Petrochemical Technology or Petrochemical Engineering) from any recognized institute with at least 40% for SC/ST, 45% for SEBC and 50% for open/other at the final year (i.e., aggregate of last two semesters in a semester systems) or Best of Ten whichever applicable to the diploma examination will be considered eligible for admission to the respective branch.
- 2) At the time of application and admission, the candidates must be serving in Government or Industries in or around Vadodara (within 70 km. radius from Faculty of Tech. & Engg. premises). Further, after the admission and till the completion of the Degree Course, candidates must be actually working in Government or Industries in or around Vadodara and also must be living within 16 km. radius from Faculty of Tech. & Engg. premises.
- 3) The candidates must be sponsored by his/her employer where he/she is employed on the full-time basis at present.
- 4) Candidates shall not be considered eligible for admission those who have passed their diploma examination in distance learning mode.

Procedure of Admission

- a) The available seats will be filled-in the ratio of **70:20:10** respectively in each branch for (i) Diploma-holders of Polytechnic of The M.S. University (ii) Diploma holders of other Polytechnics in Gujarat State and (iii) Diploma holders of Polytechnics outside Gujarat State.
- b) The admissions will be governed by marks obtained in theory papers only by the candidates at the qualifying examination and the weightage of the period of experience as per rules provided the candidates fulfills the minimum requirement of eligibility as stated above. **The weightage of experience shall be 1.5% per every year after passing diploma (from the date of issue of final year marksheet) subject to a maximum of 15%** (Apprentice experience will not be considered).
However, **two percentages of marks will be deducted for every additional attempt to pass any of the last two semesters/final year of the diploma course for the purpose of calculation of percentage of marks for determining the merit for admission.**
- c) Reservation of seats will be as per the **rules of Government of Gujarat.**



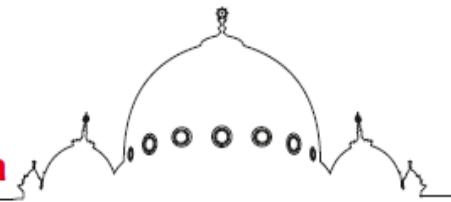
Procedure for Application

- (i) Applicant must register online from **1st September 2022** to **24th September 2022**.
- (ii) Applicant must collect the “**Information Data and Employer’s Declaration**” form from the PTD office (Room No. 28) of the Faculty of Tech. & Engg. on producing print out of online application form and submit it during 1st September 2022 to 30th September 2022 (on all working days) in the same office between 2.30 p.m. to 5.30 p.m. along with necessary documents and testimonials.
- (iii) Incomplete online application and “Information Data and Employer’s Declaration” forms are liable to be rejected.
- (iv) Submission of a Thalassemia blood testing report is compulsory to confirm the admission.

Certificates required to be attached along with the application:

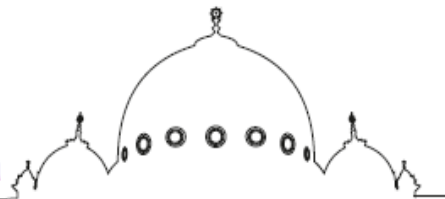
- (1) Diploma passing certificate
- (2) All the mark sheets including all attempts of the diploma course
- (3) Migration certificate (Non -MSU students)*
- (4) Transfer certificate (MSU students)*
- (5) Statement of marks of best 10 subjects for Technical Education Board (TEB) candidates
- (6) Current and past experience certificates of all jobs indicating date of joining and leaving the service (last two years income tax return statement for self-employed candidates)
- (7) “Non creamy layer certificate” from the competent authority for SEBC candidate valid for the year 2022-23
- (8) Candidate claiming in physical handicapped quota shall have to get certificate from the civil surgeon for the disability not less than 40%
- (9) Caste certificate from the competent authority in case of (ST/SC/SEBC)
- (10) Thalassemia blood test report*
- (11) Ex-Serviceman claiming in defense quota shall be required to submit a certificate to that effect duly issued by the Director, sainik welfare board, Gujarat state or by the District Sainik Welfare Officer. In - Service defense persons notified by the ministry of Home Affairs, Police Division-II, Government of India shall be required to submit certificate to that effect duly issued by the commanding officer of the respective unit in which they are serving.
- (12) EWS category candidates shall be required to attach certificate issued by competent authority.

* May be submitted within 15 days after taking admission.



Applicants of various reputed Industries/Companies taking admission in the part-time degrees course





**ADMISSIONS OPEN
FOR GUJARAT'S LEADING
STATE UNIVERSITY,**

The Maharaja Sayajirao University of Baroda!



VISIT THE LINK GIVEN BELOW FOR REGISTRATION AND
APPLICATION ACROSS ALL THE FACULTIES

admission.msubaroda.ac.in

SOCIAL MEDIA HANDLED BY MSU COMMUNICATION CELL

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Contact

Prof. P. T. Deota

Deputy Director

Part-Time Degree Courses

Faculty of Technology and Engineering,

The Maharaja Sayajirao University of Baroda,

Opp. Badamdi baug, KALA BHAVAN,

Vadodara-390001 (Gujarat) INDIA

www.msubaroda.ac.in

E-mail : ptdoffice-techo@msubaroda.ac.in

Tel. No.: 0265-2435405 (EXT. 108)

0265-2434188 (EXT. 108)