

# Madhav Institute of Technology & Science, Gwalior- 474005

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)



(ADMISSION BROCHURE-2022)  
MASTER OF URBAN PLANNING

## About Institute

### History

Madhav Institute of Technology & Science (MITS), Gwalior was established in 1957 by **His Highness Sir Jiwajirao Scindia**, Maharaja, of the erstwhile state of Gwalior under open door policy of Govt. of India. The foundation stone of the institute was laid by the then **President Dr. Rajendra Prasad**, on 20th October, 1956 and the building was inaugurated by President **Dr. S. Radhakrishnan** on 11th December, 1964. On the occasion of Golden Jubilee Celebrations of the institute, the President of India, Dr. Pratibha Devi Singh Patil graced the Golden Jubilee Celebrations of the institute as Chief Guest on 30th June, 2008. A postal stamp on MITS was also released on this occasion.

### Autonomy & Accreditation

The institute is affiliated to RGPV, Bhopal but has academic autonomy since 2002 to run courses of its choice. Recently the institute has been granted autonomy by UGC, New Delhi for a period of 6 years w.e.f July 2017. The institute is also accredited by the National Assessment and Accreditation Council (NAAC) for 5 years from September 2017. Many of the programmes are accredited by the National Board of Accreditation (NBA).

### Quality Culture

An Internal Quality Assurance Cell (IQAC) was established in December 2016 to evolve mechanism and procedures for measuring, monitoring and evaluating quality for various academic and administrative activities of the institution, for the internalization of quality culture and institutionalization of best practices.

### MOODLE Server

The institute started its own MOODLE Server (Modular Object-Oriented Dynamic Learning Environment) on 15th august 2017 for open source course management system to facilitate E-learning, Evaluation, Test / Quiz Conduction, Uploading Assignments etc

### Campus, Courses & Centres

The institute has a lush green environment conscious campus of around 44.6 acres which also includes '**Madhav-Van**' a small teak wood forest where a large variety of birds can be sighted. The

Institute offers 11 Bachelors, 18 Masters and Doctoral Degrees Programmes in Engineering and Technology. The Institute is a recognized **Quality Improvement Programme (QIP) Centre** for PG and Ph.D programs. The prime objective of the institute is to provide quality technical education at undergraduate and postgraduate levels. There is Study Centre of Indira Gandhi National Open University (IGNOU) and Nodal centre of RGPV, Bhopal.

### **Local Centre of NPTEL**

NPTEL(National Programme on Technology Enhanced Learning) Local Chapter has been established on 30th Oct 2017 to provide e-learning through on-line Web and Video courses in Engineering, Sciences, Technology among students.

### **Infrastructure**

The Institute has state-of-the-art infrastructure encompassing spacious class rooms equipped with power point projectors, well equipped laboratories, three boys hostels, two girls hostels, Play ground, Gymnasium, Dispensary, Bank, ATM, Stationary & Photocopy shop, Canteen, Amul Parlour, Coffee Shop etc.

Central Library currently houses over 1,00,000 books, e-journals from Science Direct, ASME and ASCE under E-ShodhSindhu & INFLIBNET consortium. The Institute has a high speed LAN with backbone of optical fiber and manageable switches. The institute is equipped with 200 MBPS leased line from NKN, which is providing high speed 24x7 internet facility in each nook and corner of the Institute.

### **Professional Society Chapters & Club Activities**

To harness the immense potential and vivacious energy of the students for their all round personality development and confidence building, the institute provided a very active NSS and NCC wing, 07 Chapters of National/International Professional Societies (ISTE, IEEE, IET, ACM, CSI, IETE and SAE-INDIA) & 60 different institute level student clubs in wide areas ranging from technology, art, music, dance, meditation, yoga, health, sports, environment, social awareness etc.

### **Sports Facilities**

The institute has cricket, basketball, football and tennis grounds, and badminton court along with facilities for indoor games. The institute has been successively receiving awards and top ranks in many sporting events such as Table-Tennis, Badminton, and Basket-ball at the nodal and state level. Prizes are also won in Kho-Kho, chess and football.

## MUP Admission Schedule

S.No.	Activity	MUP (GATE Qualified)	MUP (NON-GATE)
1.	On-Line registration through website <a href="http://www.mitsgwalior.in">www.mitsgwalior.in</a> (Registration Fee Rs. 1500/- for General candidates and Rs.1000/-for SC/ST candidates through online transaction in below mentioned institute account)	25 August 2022– 04 September 2022	25 August 2022– 04 September 2022
<b>FIRST ROUND COUNSELLING GATE CANDIDATES/NON-GATE Candidates )</b>			
2.	Display of Course/Category wise merit list (GATE/NON-GATE)	05 September 2022	GATE/NON-GATE
3.	Document verification of short-listed candidates at the Institute <b>(GATE CANDIDATES)</b>	09 September 2022 (10:30AM) onwards)	
4.	Fees payment of selected candidates (DD/NEFT/RTGS/Cash)	09 September 2022- 10 September 2022	
5.	Display the list of vacant positions on the Institute website	12 September 2022	
6.	Document verification of short-listed candidates at the Institute <b>(NON-GATE CANDIDATES)</b>	16 September 2022 (10:30AM) onwards)	
7.	Fees payment of selected candidates (DD/NEFT/RTGS/Cash) NON-GATE	16-17 September 2022	
8.	Display the list of vacant positions on the Institute website	19 September 2022	
<b>SECOND ROUND COUNSELLING (SPOT ROUND for GATE and NON-GATE candidates/CLC)</b> (if seats remain vacant after First Round counseling)			
9.	CLC reporting and registration (Registration Fee Rs. 1500/- for General candidates and Rs.1000/-for SC/ST candidates) DD In favor of Director MITS Payable at Gwalior	26 September 2022, 10.30 AM-12.30 PM	
10.	Document verification at the institute	26 September 2022 10:30 AM- 12.30 PM	
11.	Written test of the eligible candidates in the Architecture Department (If required)	26 September 2022 12.30-1.30 PM	

12.	Display the Merit List	26 September 2022 2.00 PM
13.	Fees payment of selected candidates on the same day	26 September 2022 2.00 -04.00 PM
<b>THIRD ROUND COUNSELLING (SPOT ROUND for GATE and NON-GATE candidates/CLC)</b> (if seats remain vacant after second Round counselling)		
14.	CLC reporting and registration (Registration Fee Rs. 1500/- for General candidates and Rs.1000/-for SC/ST candidates)	22 October 2022, 10.30 AM-12.30 PM
15.	Document verification at the institute	22 October 2022 10:30 AM- 12.30 PM
16.	Written test of the eligible candidates in the Architecture Department (If required)	22 October 2022 12.30-1.30 PM
17.	Display the Merit List	22 October 2022 2.00 PM
18.	Fees payment of selected candidates on the same day	22 October 2022 2.00 -04.00 PM

- The merit for spot round will be prepared according to GATE score first and then according to written Test, if required (for non-GATE candidates).
- Changes in schedule, if any and all the results/lists & correspondence shall be placed on official website of the Institute ([www.mitsgwalior.in](http://www.mitsgwalior.in)).
- The selected candidate must **deposit the complete fee through DD/NEFT/RTGS/Cash** as per mentioned dates specified above, otherwise his/her admission may be treated as cancelled and the seat may be offered to next candidate or will move as vacant to next round. For fees details visit the website of the Institute.
- **For SPOT-ROUND reporting at the institute on time should strictly be followed. Registration Fee is to be submitted.**
- **All the information and lists will be displayed on the web-site of the Institute. No separate communication will be done**

## Programme offered

S.No.	Department	Architecture & Planning Programme	No. of seats *
<b>REGULAR P.G. COURSE (Duration: Four Semester)</b>			
1.	Architecture & Planning	Master of Urban Planning	18

**Note:**\*Reservation to different category as per M.P.Govt.Norms. In case, suitable candidates are not available in a particular category, conversion of seats will be done as per M.P. Government norms.

## Course Eligibility Criteria

S.No.	Course Name	Course Type	Eligibility
1	Master of Urban Planning	Full Time	Bachelor's Degree in Planning or Architecture or Civil Engineering or Architectural Engineering or Environmental Engineering or equivalent, or Masters Degree in Environmental Science or Environmental Management or Geography or Economics or Sociology from a recognized University or equivalent with minimum 55% marks or equivalent grade.

Note: Candidate belonging to SC/ST Category will get relaxation of 10% marks in the Qualifying Examination.

## Financial Assistance and other support

Scholarship will be given to full time GATE qualified students admitted to MUP Course as per AICTE norms and approvals, if approved by AICTE, New Delhi. Scholarship shall be provided by AICTE, New Delhi to the students by direct cash transfer for which student shall need to register on AICTE web portal.

## Important Guidelines

- Candidates are required to apply Online on institute website as per the schedule given in the page no.3-4. Candidates are required to pay application fee Rs. 1500/- for General candidates and Rs.1000/-for SC/ST candidates through online Transaction in below mentioned Bank account .
- Candidates are advised to check the eligibility for the program (refer “Course Eligibility criteria” given from page no 6) in which admission is sought before filling the application form.
- First round of Off-Campus counselling will take place for Candidates with valid GATE Score & Non Gate Students (only on vacant seats after admission of All GATE CANDIDATES).
- Candidates who have appeared in GATE but not qualified (securing less than minimum qualifying marks), and who have not appeared in GATE will also be considered for admission on the basis of merit of the On-Campus Test(if required) conducted by the Institute, however without AICTE Scholarship. These candidates may be offered admissions, only if seats remain vacant after the admission of all gate qualified students. These candidates are advised to visit institute website for notification of such vacant seats and the schedule regularly. On-Campus Test comprises of Multiple-Choice Questions (MCQ). Syllabus is given on the page no 9.
- No TA/DA will be admissible for attending written test.
- No separate call letter will be issued from the Institute for Written test.
- Any course having five or less than five admissions will not run.
- **The reservation will be applicable for SC/ST/OBC candidates of Madhya Pradesh, as per Govt. of M.P. rules.**
- The candidates need not send the hard copy of the application form to the Institute.
- The merit for spot round will be prepared according to GATE/CEED score first and then according to written test which will be conducted in institute (for non-GATE candidates).
- For fees details, please visit the website of the Institute [www.mitsgwalior.in](http://www.mitsgwalior.in).

## Check List of Documents required at the time of counselling

S.No	Documents
1.	Printout of online application form.
2.	Receipt of online payment for registration
3.	Original GATE Score Card (if applicable).
4.	Proof of Date of Birth (like Certificate/Mark-sheet of HSC/HSSC Examination)
5.	Qualifying Degree
6.	Mark sheets of all the years of qualifying degree.
7.	Caste Certificate (in case of SC/ST/OBC candidates of M.P. state).
8.	Candidates who have acquired qualifying degree from a self-financed Institution (out of M.P.) are required to ensure about AICTE approval of the Institute from the Head of the concerned Institution.
9.	Transfer Certificate and Character Certificate from the Principal of the College last attended (may be submitted within 15 days after admission).
10.	Migration Certificate (may be submitted within 15 days after admission).
11.	GAP Certificate (if any).
12.	Two self-photographs
13.	Aadhar Card
14.	PAN card

**NOTE:** All the documents must be in original. All documents except Transfer Certificate and Migration Certificate will be returned after verification. Candidate must bring two sets of self-attested photocopies of all the documents.

## Fee & Payment details

- List of candidates selected for admission will be required to deposit **one semester fee** through DD/NEFT/RTGS/Cash and complete the formalities for registration in the institute as per schedule.
- If the candidate does not deposit the fee within stipulated time, his/her candidature shall be considered cancelled and the eligible candidates from the waiting lists may be offered admission against vacant seats as per the schedule. Such candidates from the next list, therefore, are required to deposit semester fee as per the scheduled dates, failing which their candidature will be treated as cancelled.
- For fees details, please visit the website of the Institute [www.mitsgwalior.in](http://www.mitsgwalior.in).
- Candidates has to pay registration fee through NEFT account transfer to the following account (**Please keep a scanned copy of the transaction receipt. scanned copy will required at the time of online registration**):

A/c no. 521202051000101

IFSC Code UBIN0570036

A/c Name: Director MITS Gwalior

Bank: Name Union Bank of India



## Written Test Syllabus

- **Section 1:** Architecture, Planning and Design Architectural – Graphics; Visual composition in 2D and 3D; Computer application in Architecture and Planning; Anthropometrics; Organization of space; Circulation- horizontal and vertical; Space Standards; Universal design; Building bye laws; Codes and standards;
- **Section 2:** Construction and Management – Project management techniques e.g. PERT, CPM etc. ; Estimation and Specification; Professional practice and ethics; Form and Structure; Principles and design of disaster resistant structures; Temporary structures for rehabilitation;
- **Section 3:** Environmental Planning and Design – Natural and man-made ecosystem; Ecological principles; Environmental considerations in planning and design; Environmental pollution- types, causes, controls and abatement strategies; Sustainable development, goals and strategies; Climate change and built environment; Climate responsive design;
- **Section 4:** Urban Design, landscape and Conservation – Historical and modern examples of urban design; Elements of urban built environment – urban form, spaces, structure, pattern, fabric, texture, grain etc.; Concepts and theories of urban design; Principles, tools and techniques of urban design; Public spaces, character, spatial qualities and Sense of Place; Urban design interventions for sustainable development and transportation; Development controls – FAR, densities and building byelaws. ; Urban renewal and conservation; heritage conservation; historical public spaces and gardens; Landscape design; Site planning.
- **Section 5:** Planning process – Salient concepts, theories and principles of urban planning; concepts of cities - Eco-City, Smart City; Concepts and theories by trendsetting planners and designers; Ekistics; Urban sociology; Social, Economic and environmental cost benefit analysis; Methods of non-spatial and spatial data analysis; Development guidelines such as URDPFI;
- **Section 6:** Housing – Housing typologies; Concepts, principles and examples of neighbourhood; Residential densities; Affordable Housing; Real estate valuation;
- **Section 7:** Services and Infrastructure – Firefighting Systems; Building Safety and Security systems; Building Management Systems; Water treatment; Water supply and distribution system; Water harvesting systems; Principles, Planning and Design of storm water drainage system; Sewage disposal methods; Methods of solid waste management - collection, transportation and disposal; Recycling and Reuse of solid waste; Land-use – transportation - urban form inter- relationships; Design of roads, intersections, grade separators and parking areas; Hierarchy of roads and level of service; Para-transits and other modes of transportation, Pedestrian and slow moving traffic planning;
- **Section 8:** History and Contemporary Architecture – Principles of Art and Architecture; World History of Architecture: Egyptian, Greco-Roman classical period, Byzantine, Gothic, Renaissance, Baroque-Rococo, etc.; Recent trends in Contemporary Architecture: Art nouveau, Art Deco, Eclecticism, International styles, Postmodernism, Deconstruction in architecture, etc.; Influence of Modern art and Design in Architecture; Indian vernacular and traditional Architecture, Oriental Architecture ; Works of renowned national and international architects
- **Section 9:** Building Construction and Structural systems – Building construction techniques, methods and details; Building systems and prefabrication of building elements; Principles of Modular Coordination; Construction planning and equipment;

Building material characteristics and applications; Principles of strength of materials; Alternative building materials; Foundations; Design of structural elements with different materials; Elastic and Limit State design; Structural systems; Principles of Prestressing; High Rise and Long Span structures, gravity and lateral load resisting systems

- **Section 10:** Building Services and Sustainability – Solar architecture; Thermal, visual and acoustic comfort in built environments; Natural and Mechanical ventilation in buildings; Air-Conditioning systems; Sustainable building strategies; Building Performance Simulation and Evaluation; Intelligent Buildings; Water supply; Sewerage and drainage systems; Sanitary fittings and fixtures; Plumbing systems; Principles of internal and external drainage system; Principles of electrification of buildings; Elevators and Escalators - standards and uses
- **Section 11:** Regional and Settlement Planning – Regional delineation; settlement hierarchy; Types and hierarchy of plans; Various schemes and programs of central government; Transit Oriented Development (TOD), SEZ, SRZ etc.; Public Perception and user behaviour; National Housing Policies, Programs and Schemes. ; Slums, Squatters and informal housing; Standards for housing and community facilities; Housing for special areas and needs.
- **Section 12:** Planning Techniques and Management – Application of G.I.S and Remote Sensing techniques in urban and regional planning; Tools and techniques of Surveys – Physical, Topographical, Land use and Socio-economic Surveys; Urban Economics, Law of demand and supply of land and its use in planning; Graphic presentation of spatial data; Local self-governance, Panchayatiraj institutions; Planning Legislation and implementation – Land Acquisition Act, PPP etc.; Decision support system and Land Information System; Urban geography and econometrics; Management of Infrastructure Projects; Demography and equity in planning
- **Section 13:** Infrastructure Planning – Process and Principles of Transportation Planning and Traffic Engineering; Road capacity and Travel demand forecasting; Traffic survey methods, Traffic flow Analysis; Traffic analysis and design considerations; Traffic and transport management and control in urban areas; Mass transportation planning; Intelligent Transportation Systems; Urban and Rural Infrastructure System Network