Doctoral Programs (Ph.D.): JUET, GUNA

The Ph.D. programs are available in various specializations such as Computer Science and Engineering, Electronics and Communication Engineering, Civil Engineering, Humanities & Social Sciences, Mathematics, Chemical Engineering, Mechanical Engineering, Chemistry & Physics. The scholars are required to take up intensive research work under the guidance of a supervisor on a specific problem for a minimum duration as specified. The research work is expected to result in new findings contributing to the knowledge in the chosen field. The doctoral research program gives an opportunity to scholars to demonstrate their analytical, innovative and independent thinking leading to creativity and application of knowledge. The scholars are required to give semester end presentation of research progress regularly and publish their work. Finally, they are required to submit the thesis embodying their research findings for the awarding of the Ph.D. degree. They are also required to take part in some advanced level course work. Department wise subjects for Ph.D programmes are listed below.

Electronics & Communication Engineering

Digital Signal Processing, Multi-dimensional and Multi-rate Signal Processing, Image Processing, Wavelet Analysis and Pattern Recognition, Integral Transforms, Wireless Communication, Mobile communication, Digital Communication, Multicarrier Communication Systems, Soft Computing, Neural Networks, VLSI Design, Renewable Energy, Micro-strip Antenna.

Computer Science & Engineering

Network Communication, Grid Computing, Cloud Computing, Image Processing, Pattern Recognition, Image Security, Network Security, SDN, Software Engineering. Artificial Intelligence, Text mining, Big Data, Data Analytics, Computer Vision, Robotics and Motion Control. Data Science, Natural Language Processing, Blockchain, Technology Intervention in public well-being, Machine Learning. Internet of Things. Unstructured Data Handling. Neural Network and Deep Learning, Digital Image Forensics.

Civil Engineering

Concrete Technology, Transportation Engineering, Geotechnical Engineering, Hydraulics & Water Resources Engineering, Advanced Construction Materials and composites.

Chemical Engineering

Treatment of volatile organic compounds (VOCs), Photo catalysis, Modeling and Simulation of industrial processes, Recovery of precious metals from spent catalysts/e-waste, Process intensification studies, Enzyme recovery, Membrane processes. Chemical reaction engineering, Heterogeneous catalysis, Industrial pollution abatement, membrane processes for recovery of precious metals from industrial waste and industrial waste water treatment using low cost adsorbents.

Mechanical Engineering

Dynamics of Machine Tools, Machine Design and Vibration Analysis, Condition Monitoring and Fault Diagnosis of Machine Structures, Tool Vibration Analysis of Machine Tools, Structural Analysis, Additive Manufacturing, CAD/CAM, Advanced Machining Processes, Micro-machining process, Combustion, Gasification, Experimental and Computational Fluid Dynamics, Turbulent Flows and Mixing Control, Heat and Mass Transfer, Magneto Hydro Dynamics, Electronics Cooling, Flow Through Micro-channels, Refrigeration and Air Conditioning, Renewable Energy, Utilization of Solar Energy, Solar Water Desalination, Engineering Data Analytics.

Physics

Nanomaterials, energy storage devices and quantum optics.

Mathematics

Fluid mechanics, Information Theory and its Applications, Fuzzy sets and logic & Fuzzy information measures.

Chemistry

Novel Surfactants, Oleo chemicals, Polymer Chemistry, Environmental Sciences, Natural Products.

Humanities and Social Sciences

Human resource management, economics and human behavior, women studies, e-commerce and social media, marketing, behavioral studies.

Ph.D. ADMISSION TEST-PROCEDURE AND SCHEDULE: 2026

1. **Eligibility Criteria Minimum Qualifications:**

(a) M. Tech Degree of a University or equivalent for Ph.D. in Engineering / Technology in respective branch with 55% Aggregate Marks or CGPA not less than 5.5 on scale of 10.

(b) Master's Degree of a University for Ph.D. in Sciences / Humanities & Social Sciences / in respective discipline or equivalent with 55% Aggregate marks or CGPA not less than 5.5 on scale of 10.

(c) Consistently good academic record performance i.e. 55% aggregate marks or equivalent CGPA of not less than 5.5 on a scale of 10 at undergraduate and post graduate level for students admitted after PG programs at (i) to (iii) above.

2. Admission Procedure: Admission for all shall be based on:

(a) Satisfying the requirements of minimum qualifications as specified above.

(b) Performance in Interview for those who have qualified in GATE/NET/SLET/UGC/CSIR (JRF) or equivalent national level examinations.

(c) Performance in :
i) The Ph.D. Entrance Test for all those who are not qualified in any of the examinations mentioned in (b) and
ii) The subsequent Interview, for short-listed candidates only, based on the written test.

(d) Entrance Test shall be qualifying with qualifying marks as 50%. The syllabus of the Entrance Test shall consist of 50% of research methodology and 50% shall be branch specific.

(e) An interview/viva-voce to be organized where the candidate is required to discuss their research interest/area through a presentation before a duly constituted Committee. The interview/viva voce shall also consider the following aspects, viz. whether;

(i) the candidate possesses the competence for the proposed research;
(ii) the research work can be suitably undertaken at the University;
(iii) the proposed area of research can contribute to new/additional knowledge.

3. How to Apply

(a) Application form can be filled online through the web link of university website: https://apply.juet.ac.in/ and application fee can be paid through internet banking/ debit card/ credit card/ UPI.

(b) Download the application form from https://www.juet.ac.in/ and send the duly filled form to the address mentioned at S.No. 7 along with an **application fee of ₹1,000/-**.

The fee may be paid through a **Demand Draft** drawn in favour of **"Jaypee University of Engineering & Technology"**, payable at **Guna (M.P.)**, or through **fund transfer/online payment** using the details below:

Bank: Axis Bank Ltd., Guna (M.P.)
Account Name: Jaypee University of Engineering & Technology
Account No.: 912010004617629
Account Type: Current Account
IFSC Code: UTIB0000679

The fee can also be paid via **QR Code** available at:
https://www.juet.ac.in/uploads/JUET-QRCodePayment.pdf

(c) Please send Information after transfer of amount, by E-mail id to **vc.pandey@juet.ac.in** as per details given below:

UTR NO. -
AMOUNT -
DATE -
BANK NAME -
STUDENT'S DETAILS -

(d) You may also obtain the application form directly from JUET, Guna by paying ₹1000/- through UPI.

(e) If the application is received along with a demand draft, it will be accepted only after the draft is cleared.

4. Written Examination Procedure

(a) Tests / Questions shall be different for each discipline of the program

(b) Test will cover all the core / compulsory subjects in the relevant Master Level degree. Written test would aim at judging the depth of knowledge and potential to do research work of the candidates.

(c) The syllabi for each program have been uploaded on the web site.

5. Personal interview shall be conducted only for the short-listed candidates (Based on written Test) except where candidate qualifies for the direct interview criteria as given in 2(b) above.

6. Format of Ph.D Admission Test Question Paper

a. Duration : 120 Minutes
b. Maximum Marks : 100
c. Distribution of Marks is as follows:

Section	Marks	No. of Questions	Topic to be covered
Section A	50	50 objective type questions. Each question will have four alternatives but single correct option. For each correct answer, 1 mark will be awarded and for an incorrect answer or an un-attempted question, zero marks will be awarded	Research Methodology
Section B	50	Part – 1 : 25 questions of 1 mark each with 4 alternatives Part – 2 : 5 questions of 5 marks each to be attempted out of 8 questions	Test will cover all the core/ compulsory subjects in the relevant Master Level degree. Written test would aim at judging the depth of knowledge and potential to do research work.

7. Important Dates and Schedule for Examination and Interview:

(a) **Receipt of Applications (Last Date) – 27 June 2026**

(b) **Send the Application (if applied offline)** (Write Ph.D. Application-JUET, Guna on the envelope) Registrar
Jaypee University of Engineering & Technology
A.B. Road, Raghogarh Guna, (M.P.)-473226
or by email to vikas.shukla@juet.ac.in

(c) **Exam Schedule**

Written Test	–	04 July 2026	10.00 AM– 12.00 PM
Interview of shortlisted candidates and GATE qualified candidates	–	04 July 2026	
Declaration of Result	–	05 July 2026	

8. **Research/Teaching Assistantship:** Financial Support (₹ 45000/-per month) shall be provided to deserving full time Ph.D. students.

9. For any query related to admissions, applicants are advised to contact:

Jaypee University of Engineering & Technology-Guna

A-B Road, Raghogarh

Distt. - Guna (M.P.) – 473226

Phone: +91-7544-267051, 267310-312, E Mail: admissions@juet.ac.in

ADMISSION HELPLINE NO. : T +91 89821 29100, WhatsApp**:** +91 89821 29105