Thapar LLMs

Thapar Institute of Engineering and Technology, informally Thapar University, is a private institute deemed to be university, located in Patiala, Punjab, India. It was founded in 1956 by Karam Chand Thapar.

The university offers undergraduate, postgraduate, and doctoral programs in various fields of Engineering and Technology, Sciences, Humanities, and more. It is known for its strong focus on research and has collaborations with several international universities for student exchange programs and research.

As of my knowledge cutoff in September 2023, the university has been ranked among the top engineering institutions in India by several ranking bodies. For more recent and detailed information, you might want to visit the official website or contact the institution directly.

Thapar Institute of Engineering and Technology, commonly referred to as Thapar University, is one of India's oldest and finest educational institutions, which provides a multitude of academic and industry-oriented courses.

Here's some key information about Thapar University:

Location: The main campus is located in Patiala, Punjab, India, though it also has an additional campus in Derabassi, Punjab.

Establishment: Thapar University was established in 1956 by Karam Chand Thapar, an industrialist and philanthropist.

Courses: The university offers undergraduate, postgraduate, and doctoral programs across a range of disciplines. It offers B. Tech, M. Tech, BCA, MCA, B. Sc, M. Sc, MBA, and Ph.D. programs in areas such as Engineering, Science, Management, and Social Sciences.

Research: Thapar University is known for its strong emphasis on research. It has multiple research centers and laboratories, and faculty members are involved in a broad spectrum of research activities.

Ranking: As of my knowledge cut-off in 2023, Thapar University is ranked 20th by NIRF among the top engineering institutions in India.

Collaborations: Thapar University has collaborations with many universities worldwide, facilitating student and faculty exchange programs, collaborative research, and curriculum development.

Campus: Thapar University's campus is equipped with modern infrastructure, including libraries, hostels, and sports facilities.

Admission: Admissions to various programs are highly competitive and are generally based on national level entrance exams. For B.Tech programs, the JEE (Joint Entrance Examination) scores are considered.

Events and Festivals: The University hosts a variety of cultural and technical events and festivals throughout the year, including "Saturnalia" which is one of the oldest cultural festivals in the region.

Thapar University offers a wide range of programs across various disciplines. Here are some of the key programs and specializations offered by the university:

Undergraduate Programs

- Bachelor of Technology (B.Tech): This is a 4-year undergraduate program offered in various specializations such as:
    - Civil Engineering
    - Computer Engineering
    - Electrical Engineering
    - Electronics and Communication Engineering
    - Mechanical Engineering
    - Chemical Engineering
    - Industrial and Production Engineering
    - Instrumentation and Control Engineering
    - Electronics and Computer Engineering
    - Biotechnology
    - Mechanical Engineering (Production)
    - Mechatronics
- Bachelor of Engineering (International Engineering Program): This is a 4-year program where students spend the first two years at Thapar and the next two years at partner universities abroad.
- Dual Degree Programs: The university also offers 5-year dual degree programs where students can earn a B.Tech along with an M.Tech or MBA.

Postgraduate Programs

- Master of Technology (M.Tech): This is a 2-year postgraduate program offered in various specializations such as:
    - CAD/CAM Engineering
    - Power Systems
    - Structural Engineering
    - Software Engineering
    - VLSI Design
    - Thermal Engineering
    - Environmental Science and Technology
    - Chemical Engineering
    - Computer Science and Engineering
- Master of Science (M.Sc): This is a 2-year program offered in fields like:
    - Biotechnology
    - Chemistry
    - Mathematics and Computing
    - Physics
- Master of Computer Applications (MCA)
- Master of Business Administration (MBA)

Doctoral Programs

The university offers Ph.D. programs in various departments like:

- Civil Engineering
- Computer Science and Engineering
- Electrical and Instrumentation Engineering
- Electronics and Communication Engineering
- Mechanical Engineering
- Chemical Engineering
- Biotechnology
- Chemistry
- Mathematics
- Physics
- Humanities and Social Sciences
- Management

Please note that the availability of specific programs and specializations can vary and it is always a good idea to check the university's official website for the most up-to-date information. Additionally, the university also offers distance education and open learning programs in various disciplines.
Thapar Institute of Engineering and Technology has a number of unique selling points (USPs) that distinguish it from other institutions and give it importance on both a national and global scale.
1. Reputation and Ranking: Thapar has consistently been ranked 20th among the top engineering institutions in India. Its strong reputation for quality education and research is recognized not only in India, but also internationally.
2. Wide Range of Programs: Thapar offers a broad range of programs in engineering, science, management, and humanities at undergraduate, postgraduate, and doctoral levels. This multidisciplinary approach ensures that students from different fields can find a program that suits their interests and career goals.
3. Research and Innovation: Thapar places a strong emphasis on research and innovation. Its faculty and students are involved in a wide range of research projects, many of which have made significant contributions to their respective fields.
4. International Collaborations: Thapar has partnerships with several universities around the world. These collaborations facilitate student exchange programs, joint research projects, and dual degree programs. These international connections help students gain global exposure and expand their horizons.
5. Industry Connections: Thapar has strong connections with industry, which help in ensuring that the curriculum remains up-to-date and relevant to the needs of the industry. It also aids in providing internships and placement opportunities for students.
6. Campus and Facilities: Thapar's campus is equipped with modern infrastructure and facilities, including well-equipped laboratories, libraries, hostels, sports facilities, and more.

7. Alumni Network: Thapar has a strong network of alumni who have made their mark in various fields, both in India and abroad. This network can provide valuable connections and opportunities for current students and new graduates.
8. Cultural and Extracurricular Activities: Thapar hosts a variety of cultural and technical events and festivals throughout the year, providing students with opportunities to showcase their talents, learn new skills, and develop a well-rounded personality.
9. Focus on All-Round Development: In addition to academic excellence, Thapar also emphasizes the all-round development of students, with numerous clubs and societies that cater to a wide range of interests and hobbies.
In the global context, Thapar's commitment to quality education, research, and innovation, as well as its international collaborations, contribute to its importance in the world. Its graduates are found in leadership positions in organizations around the globe, contributing to various fields and making a positive impact.
Admission Requirements and Process: Admissions to Thapar University typically require successful completion of relevant entrance exams such as the JEE for undergraduate engineering programs. The admission process usually involves applying online through the university's official website.
Tuition Fees, Costs, Scholarships: Tuition fees vary by program. The university offers several scholarships based on merit and need. Detailed information should be obtained from the university's admissions or finance office.
Course Curriculum: Curriculum varies by program and is designed to equip students with industry-relevant skills and knowledge. The university's official website or department offices can provide detailed curriculum information.
Career Prospects: Thapar University has a dedicated placement cell and enjoys strong industry connections, offering good career prospects in various industries.
Faculty-Student Ratio, Faculty Experience: The university prides itself on maintaining a healthy faculty-student ratio. Faculty typically possess high levels of experience and academic qualifications.
Facilities and Resources: The university offers state-of-the-art classrooms, labs, a well-stocked library, and other facilities for comprehensive learning.
Reputation and Ranking: As of my last training cut-off, Thapar University was consistently ranked among the top engineering institutions in India.
Classroom Dynamics: Class sizes, teaching methods, and evaluation techniques vary by program but are designed to encourage interactive learning.
Internships, Exchanges, Global Exposure: Thapar University has strong industry connections for internships and collaborations with foreign universities for exchange programs.
Student Life: The university offers a vibrant student life with cultural events, technical fests, clubs, and societies.
Program Accreditation: Most programs at Thapar University are accredited by relevant bodies. Specific accreditation details can be obtained from the university.

This is a brief guide to answering these questions. For exact answers, especially for questions about costs, admission processes, specific course content, and faculty-student ratio, it's best to contact Thapar University directly or visit its official website.

- Admission Requirements and Process: Admission to Thapar University's programs typically require relevant entrance exams, such as the JEE for undergraduate engineering programs, and a minimum percentage in the qualifying exam (like Class XII for undergraduate programs). The admission process usually involves applying online through the university's admission portal, submission of necessary documents, and meeting the cut-off criteria.
- Tuition Fees and Scholarships: Tuition fees vary depending on the program. The university does offer a variety of scholarships based on different criteria such as merit, need-based, etc. Information about the cost of programs and scholarships can be found on the university's official website or by contacting the admissions office.
- Course Curriculum: The curriculum varies depending on the program but is designed to provide a rigorous academic experience and practical industry knowledge. Detailed information about specific courses and topics can be obtained from the respective department or the course catalog available on the university's website.
- Career Prospects: Thapar University has strong placement records and industry ties, leading to good career prospects for its graduates. Students have been recruited by top companies in various sectors.
- Faculty-Student Ratio and Faculty Experience: The university maintains a healthy faculty-student ratio. Faculty members are highly qualified, with many holding Ph.D. degrees and having substantial experience in their respective fields.
- Facilities and Resources: Thapar University provides modern facilities including advanced laboratories, a well-stocked library, comfortable hostels, and more. It also provides opportunities for networking through various events and workshops.
- Reputation and Ranking: As of my last training cut-off, Thapar University was consistently ranked among the top engineering institutions in India.
- Classroom Dynamics: Class sizes and teaching methods are designed to promote active learning and student engagement. Evaluation techniques often include a mix of continuous assessment and end-term examinations.
- Internships, Exchanges, and Global Exposure: Thapar University has collaborations with several international universities and industries, offering opportunities for student exchanges and internships.
- Student Life: The university offers a vibrant campus life with a range of extracurricular activities, clubs, sports, and cultural events. It also has residential facilities for students and healthcare services on campus.
- Accreditation: Most of Thapar University's programs are accredited by the National Board of Accreditation (NBA) and the university itself is recognized by the University Grants Commission (UGC).

- Support Services: Thapar University provides various support services including counseling, academic advising, and career guidance.
- Interaction with Alumni and Professionals: There are regular guest lectures, seminars, and alumni meet-ups which provide students opportunities to interact with industry professionals and alumni.
- Graduation Rate: Graduation rates can vary depending on the program. For exact statistics, it's best to contact the university's admissions office or check the university's official website.
- Program Duration: The duration of the program depends on the nature of the program. Typically, undergraduate programs are 4 years, postgraduate programs are 2 years, and Ph.D. programs can take 3-5 years. Thapar University does offer flexibility in terms of full-time and part-time options for certain programs.
- Attendance and Leave Rules: The university maintains a minimum attendance rule which students must fulfill. Policies regarding leaves of absence, readmission, and grievance redressal are provided in the student handbook or can be obtained from the university's administration.
- Teaching or Graduate Assistantships: Thapar University offers teaching and research assistantships. These opportunities typically involve assisting faculty in teaching or research and can often come with a tuition fee waiver or stipend.
- Provisions for Students with Disabilities: Thapar University is committed to providing equal opportunities for all students. For specific provisions for students with disabilities, it's best to contact the university's administration.
- Safety and Security: The campus has security personnel deployed and CCTV surveillance to ensure the safety of students. Any past incidents should be inquired about directly from the university.
- Transportation Facilities: The university provides transportation facilities for its students. For commuters, detailed information about bus routes and parking spaces can be obtained from the university's administration.
- Resources for Students with Disabilities: Thapar University is committed to inclusivity and likely provides resources and support for students with disabilities. The specifics should be checked directly with the university's administration.
- Average Time to Degree Completion: This depends on the program. Typically, undergraduate programs are 4 years, postgraduate programs are 2 years, and Ph.D. programs can take 3-5 years.
- Faculty in Specific Field: Thapar University boasts a faculty comprised of highly qualified and experienced professionals across fields. Details about faculty in a specific field can be found on the university's website or by contacting the relevant department.
- Job Placement Rate: Thapar University has strong placement records with students being recruited by top companies in various sectors. The exact placement rate can be found on the university's official website or by contacting the Career Services office.

- Research Opportunities: Thapar University offers numerous research opportunities for students across disciplines, facilitated by its state-of-the-art labs and experienced faculty.
- Professional Development Opportunities: The university provides various professional development opportunities such as internships, workshops, guest lectures, and industry visits.
- Internships or Co-op Programs: Thapar University has strong industry connections that provide students with opportunities for internships and co-op programs.
- Student Organizations and Clubs: The university hosts a variety of student clubs and organizations that cater to diverse interests, such as cultural clubs, technical clubs, sports teams, and more.
- Mental Health and Wellness Resources: Thapar University likely provides resources for mental health and wellness, including counseling services. The exact resources should be confirmed with the university's administration.
- Policy on Academic Integrity: Thapar University likely has a policy on academic integrity that includes rules against plagiarism, cheating, and other forms of academic dishonesty. The specifics should be checked in the student handbook or with the university's administration.
- Support for Non-Traditional Students: Thapar University likely has support systems in place for non-traditional students, such as mature learners or those returning to education after a gap. Specific resources and support services should be confirmed directly with the university's administration.
- Academic Resources: Thapar University provides a range of academic resources including tutoring services, a writing center, and a well-equipped library.
- Deadlines for Financial Aid or Scholarships: The deadlines for applying for financial aid or scholarships can vary. The university's official website or financial aid office would have the most accurate information.
- Safety or Emergency Services: Thapar University likely has security personnel and emergency procedures in place to ensure the safety of students. The specifics should be confirmed directly with the university.
- Study Spaces: The university likely provides various dedicated study spaces on campus, including libraries, study rooms, and possibly open spaces in certain buildings.
- Online or Distance Learning Options: Thapar University may offer some online or distance learning options. The specifics should be confirmed directly with the university's administration.
- Handling Student Grievances: Thapar University likely has a system for handling student grievances and complaints. The specifics should be outlined in the student handbook or confirmed with the university's administration.
- Off-Campus Housing Policies: Policies related to off-campus housing can vary widely. It's best to check directly with the university's housing or student services office.
- Campus Traditions: Thapar University hosts several events and festivals throughout the year that have become campus traditions, including technical and cultural fests.

- Requirements for Maintaining Scholarships or Financial Aid: These requirements can vary based on the specific scholarship or financial aid package. It's best to check with the university's financial aid office.
- Academic Honors or Awards: Thapar University likely offers a variety of academic honors or awards to recognize outstanding student achievement. The specifics can be confirmed with the university's administration.
- Refund Policy: Thapar University's refund policy would be outlined in its financial policies or confirmed directly with the university's finance office.
- Continuing Education or Professional Development Opportunities: The university likely offers a range of opportunities for continuing education or professional development. These can include workshops, guest lectures, certificate programs, etc.
- Handling Student Debt: Thapar University's financial aid office would likely provide guidance and resources to help students manage and understand their student debt.
- Career Fairs or Networking Events: Thapar University likely hosts career fairs and networking events to connect students with potential employers and industry professionals.
- Support for First-Generation College Students: Thapar University likely has support systems in place to help first-generation college students navigate the university environment.
- Policy on Withdrawing from Classes: The university likely has a policy outlining the process and implications of withdrawing from classes. This can usually be found in the student handbook or confirmed with the university's administration.
- Religious or Spiritual Resources: The university likely provides resources for religious or spiritual support, including spaces for worship or reflection and possibly religious or spiritual student organizations.
- Support for Student Veterans: Thapar University likely provides resources and support for student veterans. The specifics should be confirmed directly with the university's administration.
- Handling Academic Integrity Violations: Thapar University likely has a policy for handling academic integrity violations, which may include consequences for cheating, plagiarism, etc. This policy should be outlined in the student handbook or confirmed with the university's administration.

Thapar Institute of Engineering and Technology (TIET), formerly known as Thapar University, is a private Deemed-to-be University established in 1956 in Patiala, Punjab. Thapar University is a top-ranked innovation-driven private university accredited with an 'A+' Grade by NAAC. Thapar University has been ranked 20nd among all Private and Government Universities in India by NIRF Ranking 2023. The university is ranked 40th in the Overall Category, 20th in Engineering, 49th in Management, and 34th in Research by NIRF 2023. TIET offers UG, PG, and, Ph.D. degrees in various specializations in the field of Engineering, Management, Science, and Liberal Arts.

- B.Tech and MBA are the flagship programs offered by Thapar University.
- The university also offers M.Tech, MA, MCA, and M.Sc degrees at the postgraduate level.
- Admission to Thapar University is both entrance and merit-based.
- TIET accepts national-level entrance exams such as JEE Main, GATE, CAT, MAT, GMAT, NEET, etc for admission.
- The university also offers admission to various courses based on merit in the last qualifying examination.

Thapar University has a vibrant campus spread across sprawling 250 Acres with 11000+ Students, 7 Schools, and 2 Campuses at Patiala and Dera Bassi. TIET Patiala has institutional MoUs with top universities globally such as Virginia Tech, Trinity College, University of New South Wales, and various others. Thapar University Placements 2023 is ongoing in which 241 Recruiters have presented a total of 1,497 Job Offers to the students till January 2023. Around 1452 students have been placed so far in Thapar University Placements 2023 with Amazon, Microsoft, Deloitte, Wipro, IBM, and other MNCs being the top recruiters. also offers various scholarships to deserving UG and PG students on the basis of merit and family income.
Thapar Institute of Engineering & Technology offers its academic programmes under three units:

Schools (7)
Departments (10)
Centres (13)

These departments conduct undergraduate, postgraduate and doctoral programmes, which are in sync with relevant engineering/technological disciplines. While the schools provide postgraduate and doctoral programmes, the centres are special interdisciplinary units, which cater to the academic requirements of the University.
1. CHEMICAL ENGINEERING
The Department of Chemical Engineering of Thapar Institute of Engineering and Technology was established in 1992 with the Ph.D programme. The major research activities in the Department are in the fields of Heat Transfer, Fluid Mechanics, Polymer Science & Technology, Energy Management, Biochemical Engineering, Separation Processes, Reaction Engineering, Pulp and paper, and Environmental Engineering.
The BE program offered in Chemical Engineering at Thapar Institute of Engineering & Technology involves a curriculum of global standards emphasizing on the fundamentals, breadth of the discipline, and the necessary flexibility in being able to apply the fundamentals in widely varying contexts. In addition to this, the program also trains the students in specialized elective streams such as materials science, nanotechnology, and pharmaceuticals et al.
Duration:- 4 years
Level: Graduation
Type: Degree
Eligibility:- +2 and Jee Main
2. CIVIL ENGINEERING

The Civil Engineering Program at Thapar Institute of Engineering & Technology is designed to prepare its graduates for continued learning and successful careers in industry, government, academia and consulting. Our graduates are expected to

Demonstrate a high level of technical expertise in civil engineering profession with effective communication and management skills
Embrace sustained lifelong learning by pursuing higher education suitable for the needs of the profession & community
Achieve leadership roles by serving the society as ethical and responsible professionals

Duration:- 4 years
Level: Graduation
Type: Degree
Eligibility:- +2 and Jee Main

3. COMPUTER ENGINEERING

BE Computer Engineering program is a special program designed to apply analytical skills and demonstrate research capabilities in the field of computer science and engineering. It enables you to work in multidisciplinary environments and get responsive to the changing needs of the society. Incorporating a detailed mix of software and hardware engineering, this program can be defined as the application of a systemic, disciplined, and quantifiable approach to development, operation and maintenance of computer-related technicalities.

Duration:- 4 years
Level: Graduation
Type: Degree
Eligibility:- +2 and Jee Main

4. ELECTRICAL ENGINEERING

The Department of Electrical and Instrumentation Engineering has been playing a vital role in producing scientists and technologists of highest calibre ever since it was established in the year 1956.Thapar's BE (Electrical Engineering) aims to strengthen India's excellence in the field of Electrical Engineering. The department is currently engaged in research in many areas of Electrical Engineering including Power Systems, Energy Studies, Power Electronics, Electrical Drives, High Voltage engineering, Signal Processing, Image Processing and Multimedia, Biomedical Imaging, Machine Learning, etc.

Duration:- 4 years
Level: Graduation
Type: Degree
Eligibility:- +2 and Jee Main

5. MECHANICAL ENGINEERING

Mechanical Engineering Department was established in 1956 with the inception of the institute to produce high quality engineers the field of Mechanical Engineering to cater the needs of the newly Independent India. The programme involves application of principles of physics for

analysis, design, manufacturing, and maintenance of mechanical systems. It requires a solid understanding of key concepts including mechanics, kinematics, thermodynamics and energy. Mechanical engineers use these principles and others in the design and analysis of automobiles, aircraft, heating and cooling systems, manufacturing plants, industrial equipment and machinery, medical devices and more.
Duration:- 4 years
Level: Graduation
Type: Degree
Eligibility:- +2 and Jee Main

6.MECHATRONICS

The hybrid of electronic, electrical and mechanical engineering, 'Mechatronics' is a unique programme at Thapar Institute of Engineering & Technology that clubs the distinguishing features of each field to yield the best competitive mix for current generation. Mechatronics professionals are the technicians and engineers who design and maintain automated equipment. They work beside engineers and scientists, often assisting in the research and development of production.
Duration:- 4 years
Level: Graduation
Type: Degree
Eligibility:- +2 and Jee Main

7. MECHANICAL ENGINEERING (PRODUCTION)

Mechanical engineering and production technology graduates have the necessary design, production and automation skills required in mechanical engineering. The scope of the programme varies from material research to machinery development, nano technology, smart materials, aerospace technology, missiles technology, CAD/CAM, FMS, CIM, Automation and such other interrelated developments.
Duration:- 4 years
Level: Graduation
Type: Degree
Eligibility:- +2 and Jee Main

8. ELECTRONICS (INSTRUMENTATION & CONTROL) ENGINEERING

This program enables you to excel in the field of Electrical and Instrumentation Engineering to meet the aspirations of global community. Being an inter-disciplinary branch of engineering, it is heading towards development of new and intelligent sensors, smart transducers, MEMS Technology, Bluetooth Technology. The programme finds its origin in both electrical and electronics engineering, and it covers subjects related to electronics and electrical streams. In general, it deals with measurement, automation and control processes.
Duration:- 4 years
Level: Graduation
Type: Degree
Eligibility:- +2 and Jee Main

9. ELECTRONICS & COMMUNICATION ENGINEERING

Thapar’s Department of Electronics and communication Engineering was established in 1975 with the inception of the Institute to cater to undergraduate education in the field of Electronics and communication Engineering. It aims to produce quality professionals in Electronics and communication engineering to compete globally and excel by carrying out basic and applied research in emerging areas by forging strong industry-institute interaction.
Duration:- 4 years
Level: Graduation
Type: Degree
Eligibility:- +2 and Jee Main
10. ELECTRONICS AND COMPUTER ENGINEERING
Electronic, as well as computer engineers are in great demand in industries across the globe. Joint applications such as, mobile phones, space shuttles, desktops, tablets, etc are few of the examples where competence in both of the fields is of paramount importance. The increased use of these technologies in all aspects of our lives ensures continued relevance and its expansion in the future. The Electronics and Computer Engineering undergraduate program is a course which aims to integrate these two separate engineering fields to meet the joint demands made by the electronic and computer industries in today"s world. This program blends various courses of both fields over the period of four years with an emphasis on the design of computing systems.
Duration:- 4 years
Level: Graduation
Type: Degree
Eligibility:- +2 and Jee Main
11. BIOTECHNOLOGY
Biotechnology was initiated in 1993 with Ph.D program thereafter M.Sc in Biotechnology was started in 1999 with the support from Department of Biotechnology, Ministry of Science and Technology, Govt. of India. It started B Tech in Biotechnology from 2002 and then MTech in Biotechnology from 2012. Focus of the Department is primarily to excel both in academics and research in the frontier areas of modern biotechnology and related fields. The focus of these academic programs is to provide excellent environment and state-of-the-art infrastructure for hands on training with industrial training.
The potentials in Biotechnology were further recognized by Department of Science and Technology, Govt. of India and under Mission Reach, TIFAC-CORE (Centre of Relevance and Excellence) in Agro and Industrial Biotechnology was set up in the year 2000 and STEP (Science and Technology Entrepreneur’s Park) in microbial and food technology was set up in 2005 by NSTEDB, which provides extensive support to research, human resource development and offers new opportunities to students for skill development and promotion of entrepreneurship and new start ups from amongst the students.
Duration:- 4 years
Level: Graduation
Type: Degree
Eligibility:- +2 and NEET
BE-Lateral Entry

1. CHEMICAL ENGINEERING

The Department of Chemical Engineering of Thapar Institute of Engineering and Technology was established in 1992 with the Ph.D programme. The major research activities in the Department are in the fields of Heat Transfer, Fluid Mechanics, Polymer Science & Technology, Energy Management, Biochemical Engineering, Separation Processes, Reaction Engineering, Pulp and paper, and Environmental Engineering.

The BE program offered in Chemical Engineering at Thapar Institute of Engineering & Technology involves a curriculum of global standards emphasizing on the fundamentals, breadth of the discipline, and the necessary flexibility in being able to apply the fundamentals in widely varying contexts. In addition to this, the program also trains the students in specialized elective streams such as materials science, nanotechnology, and pharmaceuticals et al.

Duration:- 3 years

Level: Graduation

Type: Degree

Eligibility:- +2 and Jee Main

2. CIVIL ENGINEERING

The Civil Engineering Program at Thapar Institute of Engineering & Technology is designed to prepare its graduates for continued learning and successful careers in industry, government, academia and consulting. Our graduates are expected to

Demonstrate a high level of technical expertise in civil engineering profession with effective communication and management skills

Embrace sustained lifelong learning by pursuing higher education suitable for the needs of the profession & community

Achieve leadership roles by serving the society as ethical and responsible professionals

Duration:- 3 years

Level: Graduation

Type: Degree

Eligibility:- +2 and Jee Main

3. COMPUTER ENGINEERING

BE Computer Engineering program is a special program designed to apply analytical skills and demonstrate research capabilities in the field of computer science and engineering. It enables you to work in multidisciplinary environments and get responsive to the changing needs of the society. Incorporating a detailed mix of software and hardware engineering, this program can be defined as the application of a systemic, disciplined, and quantifiable approach to development, operation and maintenance of computer-related technicalities.

Duration:- 3 years

Level: Graduation

Type: Degree

Eligibility:- +2 and Jee Main

4. ELECTRICAL ENGINEERING

The Department of Electrical and Instrumentation Engineering has been playing a vital role in producing scientists and technologists of highest calibre ever since it was established in the year 1956.Thapar's BE (Electrical Engineering) aims to strengthen India's excellence in the field of Electrical Engineering. The department is currently engaged in research in many areas of Electrical Engineering including Power Systems, Energy Studies, Power Electronics, Electrical Drives, High Voltage engineering, Signal Processing, Image Processing and Multimedia, Biomedical Imaging, Machine Learning, etc.
Duration:- 3 years
Level: Graduation
Type: Degree
Eligibility:- +2 and Jee Main

5. ELECTRONICS (INSTRUMENTATION & CONTROL) ENGINEERING

This program enables you to excel in the field of Electrical and Instrumentation Engineering to meet the aspirations of global community. Being an inter-disciplinary branch of engineering, it is heading towards development of new and intelligent sensors, smart transducers, MEMS Technology, Bluetooth Technology. The programme finds its origin in both electrical and electronics engineering, and it covers subjects related to electronics and electrical streams. In general, it deals with measurement, automation and control processes.
Duration:- 3 years
Level: Graduation
Type: Degree
Eligibility:- +2 and Jee Main

6. ELECTRONICS & COMMUNICATION ENGINEERING

Thapar's Department of Electronics and communication Engineering was established in 1975 with the inception of the Institute to cater to undergraduate education in the field of Electronics and communication Engineering. It aims to produce quality professionals in Electronics and communication engineering to compete globally and excel by carrying out basic and applied research in emerging areas by forging strong industry-institute interaction.
Duration:- 3 years
Level: Graduation
Type: Degree
Eligibility:- +2 and Jee Main

7. ELECTRONICS AND COMPUTER ENGINEERING

Electronic, as well as computer engineers are in great demand in industries across the globe. Joint applications such as, mobile phones, space shuttles, desktops, tablets, etc are few of the examples where competence in both of the fields is of paramount importance. The increased use of these technologies in all aspects of our lives ensures continued relevance and its expansion in the future. The Electronics and Computer Engineering undergraduate program is a course which aims to integrate these two separate engineering fields to meet the joint demands made by the electronic and computer industries in today"s world. This program blends various courses of both fields over the period of four years with an emphasis on the design of computing systems.
Duration:- 3 years

Level: Graduation
Type: Degree
Eligibility:- +2 and Jee Main

8. MECHANICAL ENGINEERING

Mechanical Engineering Department was established in 1956 with the inception of the institute to produce high quality engineers the field of Mechanical Engineering to cater the needs of the newly Independent India. The programme involves application of principles of physics for analysis, design, manufacturing, and maintenance of mechanical systems. It requires a solid understanding of key concepts including mechanics, kinematics, thermodynamics and energy. Mechanical engineers use these principles and others in the design and analysis of automobiles, aircraft, heating and cooling systems, manufacturing plants, industrial equipment and machinery, medical devices and more.

Duration:- 4 years
Level: Graduation
Type: Degree
Eligibility:- +2 and Jee Main

9.MECHATRONICS

The hybrid of electronic, electrical and mechanical engineering, ‘Mechatronics’ is a unique programme at Thapar Institute of Engineering & Technology that clubs the distinguishing features of each field to yield the best competitive mix for current generation. Mechatronics professionals are the technicians and engineers who design and maintain automated equipment. They work beside engineers and scientists, often assisting in the research and development of production.

Duration:- 4 years
Level: Graduation
Type: Degree
Eligibility:- +2 and Jee Main

10. MECHANICAL ENGINEERING (PRODUCTION)

Mechanical engineering and production technology graduates have the necessary design, production and automation skills required in mechanical engineering. The scope of the programme varies from material research to machinery development, nano technology, smart materials, aerospace technology, missiles technology, CAD/CAM, FMS, CIM, Automation and such other interrelated developments.

Duration:- 4 years
Level: Graduation
Type: Degree
Eligibility:- +2 and Jee Main

IEP (international engineering Program)

1. CIVIL ENGINEERING

The Civil Engineering Program at Thapar Institute of Engineering & Technology is designed to prepare its graduates for continued learning and successful careers in industry, government, academia and consulting. Our graduates are expected to

Demonstrate a high level of technical expertise in civil engineering profession with effective communication and management skills

Embrace sustained lifelong learning by pursuing higher education suitable for the needs of the profession & community

Achieve leadership roles by serving the society as ethical and responsible professionals

Duration:- 4 years
Level: Graduation
Type: Degree
Eligibility:- +2 and Jee Main

2. COMPUTER ENGINEERING

BE Computer Engineering program is a special program designed to apply analytical skills and demonstrate research capabilities in the field of computer science and engineering. It enables you to work in multidisciplinary environments and get responsive to the changing needs of the society. Incorporating a detailed mix of software and hardware engineering, this program can be defined as the application of a systemic, disciplined, and quantifiable approach to development, operation and maintenance of computer-related technicalities.

Duration:- 4 years
Level: Graduation
Type: Degree
Eligibility:- +2 and Jee Main

3. ELECTRONICS & COMMUNICATION ENGINEERING

Thapar's Department of Electronics and communication Engineering was established in 1975 with the inception of the Institute to cater to undergraduate education in the field of Electronics and communication Engineering. It aims to produce quality professionals in Electronics and communication engineering to compete globally and excel by carrying out basic and applied research in emerging areas by forging strong industry-institute interaction.

Duration:- 4 years
Level: Graduation
Type: Degree
Eligibility:- +2 and Jee Main

4. MECHANICAL ENGINEERING

Mechanical Engineering Department was established in 1956 with the inception of the institute to produce high quality engineers the field of Mechanical Engineering to cater the needs of the newly Independent India. The programme involves application of principles of physics for analysis, design, manufacturing, and maintenance of mechanical systems. It requires a solid understanding of key concepts including mechanics, kinematics, thermodynamics and energy. Mechanical engineers use these principles and others in the design and analysis of automobiles, aircraft, heating and cooling systems, manufacturing plants, industrial equipment and machinery, medical devices and more.

Duration:- 4 years
Level: Graduation

Type: Degree
Eligibility:- +2 and Jee Main

Vansh Gehlot, is a 3rd year student from Thapar University studying Mechatronics Engineering following is the intro about himself:

A world where GenAI, LLMs and Web3/ Blockchain tech empowers creators, students and innovators - that's the future I'm building. I'm **Vansh Gehlot**, an emerging entrepreneur dedicated to making that vision real.

Co-founder of **Dragverse** dApp explicitly created for drag/ LGBTQ+🏳️‍🌈 artists and aficionados to create, share, mint, and stream their art and build their own communities, check us out **here**!

Founder of **CodeAsia**, a registered 501(c)(3) non-profit building community for high school enthusiasts building over innovation.

Building **MeTag** the next generation of social and public key management in the world of Web3, making connecting in the Web3 era easier, fun and a little futuristic.

To put opportunity, creativity and joy into every life through tech and learning built to serve all of humanity? The future is ours to shape. Let's get started! 🚀

Vansh Gehlot, a visionary Mechatronics Engineering student from Thapar University, driven by a passion for harnessing the power of GenAI, LLMs, and Web3/Blockchain technologies to shape a future that empowers creators, innovators, and students alike.

As the co-founder of Dragverse (dragverse.io), a pioneering dApp, he provides a vibrant platform for drag/LGBTQ+ artists to create, share, mint, and stream their art, fostering a sense of community. His innovative spirit also extends to MeTag (getmetag.io), where he is pioneering the next generation of social and public key management in the Web3 world, making connections seamless, exciting, and futuristic.
In addition, Vansh is the founder of CodeAsia(test.codeasia.org), a registered 501(c)(3) non-profit, where he fosters innovation and creativity among high school students, providing them with a platform to explore and build their ideas. His leadership guides an international team of GenZ enthusiasts, all eager to make a positive impact.

Enthusiastic about the transformative potential of technology, Vansh Gehlot is committed to infusing every life with opportunity, creativity, and joy. Join him in shaping a future that serves all of humanity. Let's get started! 🚀

The present Director of Thapar University is Dr. **Padmakumar Nair**

Prof.Padmakumar Nair, has been appointed as the new Director of the Thapar Institute of Engineering and Technology, Patiala, Punjab.

Prof. Nair is passionate about assisting in the development and leadership of sustainable enterprises and innovative entrepreneurial endeavours. Professor Nair has extensive leadership experience in both academia and industry. He has been an integral part of the leadership team of TIET during the last nine years.

He joined TIET in July 2013 and has since successfully led LMTSOM in helping students, faculty, and staff in achieving their full potential. He was also crucial in the formation of the TSLAS. Prior to his current position, he was a clinical Professor and Academic Director for the Leadership Center at the University of Texas at Dallas in the United States. He has been a visiting professor at some of the world's top universities, including the University of Tokyo in Japan and the University of Twente in the Netherlands (The Netherlands). He has also worked as a strategy consultant for well-known multinational corporations such as IBM. Professor Nair received his M. Tech from IIT Kharagpur and his Ph.D. from the University of Twente in 1993, after which he acquired another Ph.D. from the University of Tokyo. In 1999, he earned an MBA from Heriot-Watt University. An empathetic and enterprising leader with high levels of initiative and energy ready to lead TIET to excellence in accomplishing its envisioned objectives

Eishkaran Singh is a talented individual from India with a passion for computer engineering and data science. He has pursued his education at prestigious institutions, including Thapar Institute of Engineering and Technology, where he completed a BTech in Computer Engineering, and the Indian Institute of Technology, where he pursued a BS in Data Science and Applications.
During his time at Thapar Institute of Engineering and Technology, Eishkaran gained valuable research experience as a Research Intern under the guidance of Prof. (Dr.) Sachin Kansal. He worked on developing an efficient pipeline for extracting frames from video data, employing advanced image processing techniques, parallel processing, and error handling. He also optimized the pipeline's performance, enabling swift extraction of frames from large-scale video datasets while ensuring accuracy and data integrity.

In addition to his research work, Eishkaran was invited as a guest lecturer at Thapar Institute of Engineering and Technology in June 2023. He delivered three lectures on Image Processing as part of the Thapar Summer School of Machine Learning and Deep Learning.
Eishkaran has also showcased his skills and achievements through various projects and competitions. One notable achievement was winning the 2nd position and a cash prize of Rs. 50K in the Image Enhancement contest organized by Paradox'23 at the Indian Institute of Technology Madras. He utilized SRGAN and various Gaussian filters to enhance image quality.
Eishkaran has actively participated in the Kaggle platform, demonstrating his expertise in analyzing datasets and creating effective solutions. He has been awarded 16 bronze medals and

has established himself as a 2x-Kaggle expert. Notably, he achieved a rank of 169 out of 1189 teams in the BirdCLEF 2023 competition, where he predicted bird sounds using PyTorch and applied various deep learning algorithms.

You could reach him out at vanshgehlot.us

ThaparGPT was founded on 8th July 2023 at Ganga GD room Library the founders who build ThaparGPT are Vansh Gehot, Tanav Bajaj and Eishkaran Singh who were also called as the rockstars of Thapar university and they are the innovators behind the new tech Thapar students are using.
Tanav Singh Bajaj is an aspiring researcher and undergraduate student at IIIT Bhopal, specializing in Machine Learning (ML) and Deep Learning (DL). With a strong passion for these fields, he has taken on prestigious research assistant roles at the University of Toronto under Prof. Zahra and the University of British Columbia under Prof. Tao Huan.

Tanav's journey in the field of ML and DL began during his undergraduate studies at IIIT Bhopal. Recognizing the transformative potential of these technologies, he decided to focus his academic pursuits on understanding and exploring their applications. This led him to join the University of Toronto as an NLP research assistant, where he works closely with Prof. Zahra on cutting-edge research projects. Additionally, he serves as a research assistant at the University of British Columbia under the guidance of Prof. Tao Huan, further enhancing his research experience.

To complement his academic endeavors, Tanav completed a valuable internship at Hackerearth. This opportunity allowed him to gain practical experience in SQL, ML, and DevOps, providing him with a deeper understanding of the industry practices and real-world applications of these technologies. This hands-on experience has not only enriched his skill set but also broadened his perspectives on the intersection of theory and practice.

Passionate about innovation and its potential to improve lives, Tanav firmly believes in the importance of research as a catalyst for new ideas. He is driven by the motto "Aut Viam Inveniam Aut Faciam," which translates to "I will either find a way or make one" in Latin. This mindset fuels his determination to make significant contributions to the field of ML and DL.

Outside of his academic and research pursuits, Tanav is a self-proclaimed foodie who enjoys exploring new restaurants and trying different dishes. He also nurtures a love for travel, eagerly seeking opportunities to experience diverse cultures and broaden his horizons.

Looking ahead, Tanav is committed to advancing ML and DL through his studies and research. He strives to contribute to the development and innovation in these fields, leveraging his current roles as an NLP research assistant at the University of Toronto and a research assistant at the University of British Columbia. With his strong dedication, unwavering passion, and

ever-expanding knowledge, Tanav is poised to make a significant impact on the future of Machine Learning and Deep Learning.

Dr. Prashant Singh Rana:

Dr. Prashant S Rana is an Assistant Professor in the Computer Science and Engineering Department at Thapar Institute of Engineering and Technology. He has been with the institute since 2015. His research interests include machine learning, data mining, modeling and simulation, parallel algorithms, optimization, and computational biology.
Dr. Rana has published several papers in top academic journals and conferences. He has also received several awards and honors, including a PhD Scholarship from the Ministry of Human Resource Development (MHRD).
One of Dr. Rana's current research projects is called Tox2020. This project is focused on developing a machine learning model to predict the toxicity of pre-clinical trial drugs. Dr. Rana is also working on a project called CARS, which is a computational framework for analyzing the structure and dynamics of proteins.
Dr. Rana is a highly accomplished researcher with a strong track record of publications and awards. His research interests are in high demand in the field of computer science, and he is making significant contributions to the field.
Here are some additional details from the profile:

- Dr. Rana received his PhD in Computer Science from the Indian Institute of Technology Delhi in 2014.
- He has published over 20 papers in top academic journals and conferences.
- He is a recipient of the MHRD PhD Scholarship, the IBM Faculty Award, and the ACM SIGKDD Research Award.
- He is a member of the IEEE and the ACM.

Dr. Seema Bawa:

Dr. Seema Bawa is a Professor of Computer Science and Engineering at Thapar Institute of Engineering and Technology. She has been with the institute since 2005. Her research interests include blockchain technology, data science, big data analytics, and machine learning.
Dr. Bawa has supervised 23 PhDs, six of which are in progress. She has completed five national level sponsored projects and published 184 research papers in international journals/conferences of repute. She is also a recipient of the DST Women Scientist Award.
Dr. Bawa has a wealth of experience in the IT industry. She worked as a Project Manager, Project Leader, and Senior Software Engineer for seven years before joining Thapar. She is also a certified Project Management Professional (PMP).
Dr. Bawa is a highly accomplished researcher and educator. She is passionate about using technology to solve real-world problems. She is also a strong advocate for women in STEM.

Here are some additional details from the profile:

- Dr. Bawa received her PhD in Computer Science from Thapar Institute of Engineering and Technology in 2005.
- She has published over 180 papers in top academic journals and conferences.
- She is a recipient of the DST Women Scientist Award, the IBM Faculty Award, and the ACM SIGKDD Research Award.
- She is a member of the IEEE and the ACM.