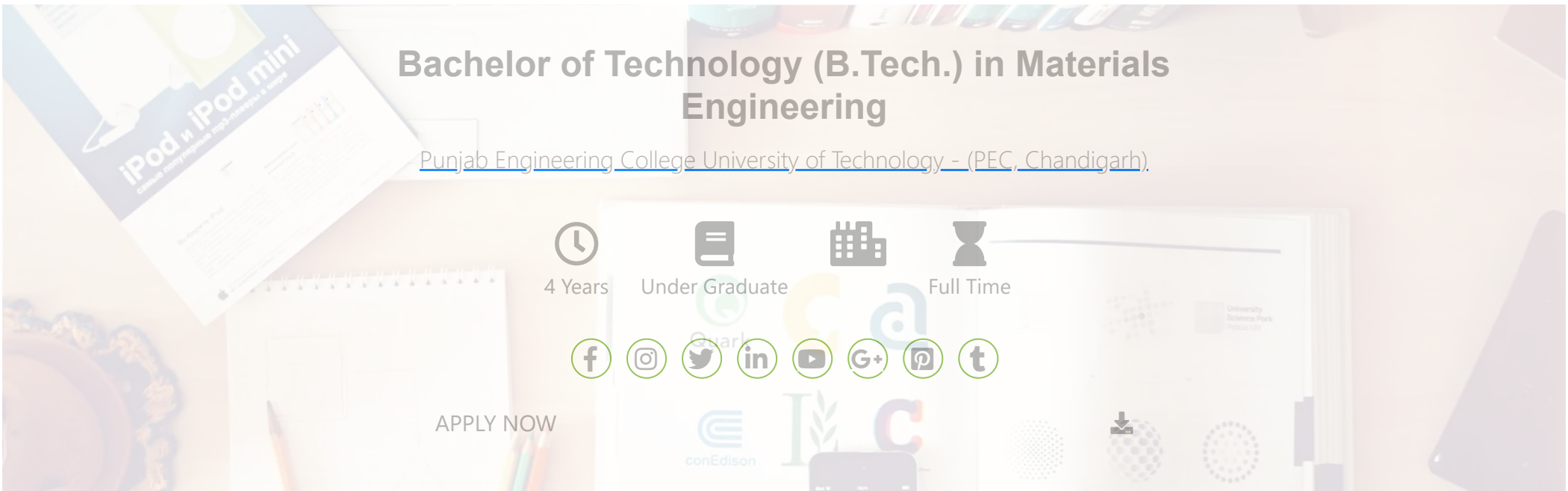

Bachelor of Technology (B.Tech.) in Materials Engineering

Punjab Engineering College University of Technology - (PEC, Chandigarh)

4 Years | Under Graduate | Full Time

APPLY NOW

Bachelor of Technology (B.Tech.) in Materials Engineering

If you want to be a professional engineer, you can pursue a career in materials science. Graduates of this program will have a wide range of options. Some choose to work in the engineering field, such as manufacturing. Others may opt for positions in the business world, such as business analysts or management consultants. While many people choose to work as engineers, materials science professionals are also in high demand for jobs in the pharmaceutical, electronics, and biotechnology industries.

The **syllabus for material science engineering** varies between universities and colleges, but all students will need the same background to succeed. The curriculum for this course is prescribed by various universities and is suitable for individuals who are interested in materials, and are interested in developing new products or improving existing products.

Benefits of B.Tech. in Materials Engineering

B.Tech. in Materials Engineering allows students to put theory into practice and connect with industry leaders early. It can give them a competitive advantage when applying for jobs after graduation. Graduates can also go on to further specialize in their field. Depending on their interests, a materials science degree can be combined with a commerce or engineering degree or even a Master of Biomedical Engineering.

As our world continues to evolve, it is more important than ever to understand the underlying principles of solid state physics and chemistry. We live in a world where solid-state materials are the basis for almost everything that we do. From energy to transportation to housing, the materials we use can be found everywhere. The science of materials is essential to helping us meet our goals and improve our lives. In fact, we cannot imagine our lives without

them. With more emphasis on global development, the importance of materials has never been higher. With the development of new technologies, the need for new materials and processes is growing exponentially.

Eligibility for B.tech in Materials Engineering

The candidates must have completed their 10+2 in relevant stream from recognized board. They must have a minimum aggregate of 50% marks.

Future Scope of B.Tech. in Materials Engineering

The **future scope of B.Tech. in Materials Engineering** is huge. The job profile is diverse, from developing and manufacturing new products to analyzing and studying existing materials. The job involves evaluating and designing machinery and processes to develop new materials. In many cases, the material scientist will specialize in a particular area. Some of the common specializations include plastics, glass, ceramics, metals, and naturally occurring materials.

Today, a **B.Tech. in Materials Engineering graduate** will be in demand in numerous industries. Opportunities for jobs in the field are huge. The field has contributed to the microelectronics industry and the manufacturing industry. Its graduates will be able to provide technical support to companies and be responsible for product design and development.

There are many fields that material engineers can work in. They can be involved in the management and technical support of manufacturing industries. They can also work in research and development in other fields such as electronics and the biomedical sector. By pursuing their education in materials engineering, you can expect to find a wide range of career opportunities.

Career Opportunities and Job Prospects of B.Tech. in Materials Engineering

The growth of the field of materials engineering will continue to be strong in the next decade. According to the Bureau of Labor Statistics, the number of jobs for materials engineers will increase by nine percent. This means that there will be a need for more than 1,900 new positions in the coming decade. While there is no certainty of the number of jobs available for graduates, this growth means that they will have good job prospects in the foreseeable future. This is particularly true as many current materials engineers are expected to retire or be promoted.

The field of materials engineering is expanding fast, and those who graduate with a degree in this discipline will have a good job outlook. After completing a Bachelor's degree, graduates will be able to pursue a career in materials science. Some five-year materials engineering programs award bachelor's degrees as well as a master's degree. Having the ability to work in the field of materials science and engineering will be a major asset to prospective employers. Regardless of the field of study, there is no shortage of jobs.

Course duration and fee details of B.tech in Materials Engineering

B.Tech. in Material Engineering is a four-year degree program. The average fees for the completion of program are between 350K to 900K INR, or it may vary from college to college.

Campus	University	Delivery Mode
Chandigarh	Punjab Engineering College	

Eligibility	Duration	Type of Course
10+2 in Related Stream From Recognized Board	4 Years	Under Graduate

Syllabus of Bachelor of Technology (B.Tech.) in Materials Engineering

Year 1st OR 1st and 2nd Semester Syllabus of Bachelor of Technology (B.Tech.) in Materials Engineering

S.No	Subjects
1	Fundamentals of Materials Science
2	Applied Mathematics and Process Modeling
3	Materials Characterization Techniques
4	Nanoscience and Technology
5	Processing and Design of Materials
6	Composites Science and Technology
7	Aerospace Materials

Year 2nd OR 3rd and 4th Semester Syllabus of Bachelor of Technology (B.Tech.) in Materials Engineering

S.No	Subjects
1	Biomaterials
2	Soft Materials
3	Computational Materials Science
4	Chemical Rocket Propellants
5	Thin Films and Surface Engineering

Year 3rd OR 5th and 6th Semester Syllabus of Bachelor of Technology (B.Tech.) in Materials Engineering

S.No	Subjects
1	Mechanical Behavior of Materials
2	Paints and Coatings
3	Advanced Characterization Techniques

Students also visited

- Maharaja Ranjit Singh Punjab Technical University, Bathinda ...
- Indian Institute of Science Education and Research, Mohali (IISER Mohali), Sahibzada Ajit Singh Nagar...
- Bhutta College of Engineering and Technology (BCET, Ludhiana), Ludhiana...
- Guru Nanak Institute of Management And Technology (GNIMT, Ludhiana), Ludhiana...
- Gujranwala Guru Nanak Institute of Management And Technology (GGNIMT, Ludhiana), Ludhiana...
- Ludhiana College of Engineering And Technology (LCET, Ludhiana), Ludhiana...
- Institute of Nano Science and Technology (INST, Mohali), Mohali...
- Sidana Institute of Management And Technology (SIMT, Amritsar), Amritsar ...
- Global Institute of Management (GIM, Amritsar), Amritsar ...
- Bebe Nanaki University College (BNUC Kapurthala), Kapurthala ...

4	Corrosion Science and Technology
5	Electronic, Photonic and Magnetic Materials

Year 4th OR 7th and 8th Semester Syllabus of Bachelor of Technology (B.Tech.) in Materials Engineering

S.No	Subjects
1	Fundamentals of Polymer Science
2	Specialty Polymers
3	Rubber Technology
4	Electrochemical Energy Storage systems

Punjab Engineering College University of Technology - (PEC, Chandigarh) Highlights

Established in	1953
University Type	Deemed University
Recognized by	AICTE , NAAC ,
Courses	24