



Zagdu Singh Charitable Trust's (Regd.)

THAKUR COLLEGE OF ENGINEERING & TECHNOLOGY

Autonomous College Affiliated to University of Mumbai,
Approved by All India Council for Technical Education(AICTE),
Govt. of Maharashtra(GoM)

website:www.tcetmumbai.in

Information Brochure

B. Voc Artificial Intelligence and Data Science

*Designed for Skill Development
and
New Age Employment*

Duration: 3 Years

Starting from A.Y. 2021-22

Why B. Voc.

- More Practical, less Theory
- Become Entrepreneur
- Earn while, You Learn
- Run Startup at Early Age

Selection Procedure

Based on the merit

Eligibility Criteria

10+2/ HSC or equivalent
from any recognized board
in Science, Commerce and
Arts Streams.

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With Power of Knowledge, Celebrate Life



Estd. in 2001

About TCET

The Thakur College of Engineering & Technology (TCET), a Graded Autonomous Linguistic Minority Institute was established in AY 2001-02 with a clear objective of providing Quality Technical Education in tune with international standards and contemporary global requirements. TCET offers 11 UG, 3 PG and 3 Ph.D. (Tech.) programmes. Besides this, TCET has started B.Voc. in Artificial Intelligence and Data Science w.e.f. A.Y. 2021-22. TCET is ISO 9001:2015 certified Institute. Certification has helped Institute to develop a process-driven-student-centric system required for quality education in the 21st century. As a result, Institute is accredited by NAAC with an "A" grade for five years and programmes are accredited by NBA for three years. TCET has always been known for its unique journey of deciphering and deploying innovative approaches in academics. The institute also takes initiatives in implementing innovative academic and technology endeavours aligned with the directives of statutory and regulatory bodies.

B. Voc. Programme: (Bachelor of Vocational Studies)

The Vocational Educational Programme mainly focuses on job-specific skills rather than Broad-based Education. The main objective of this programme is to enable the students to acquire skills and learn the fundamental technologies by engaging in on-the-job training of the industry along with the theory in academic serene.

The Vocational Course Programme is a three year programme and is a combination of Practical and Theory courses. The three year programme is of 6 semesters with 2 semesters each year.

In the emerging Data Economy, Data Scientists are responsible for finding better ways to analyze and process information to create new opportunities and improve efficiencies. Various job roles in the field of 'Artificial Intelligence and Data Science' are Data Analyst, Data Engineers, Data Scientist, Data Architect, Statistician, Database Administrator, Business Analyst, Business Intelligence Developer, Machine Learning Engineer, AI Engineer. According to Analytics Insight, the global market of Big Data is forecast to grow from the US \$179.6 billion in 2019 to the US \$301.5 billion in 2023.

NSQF and SSCs:

The National Skills Qualification Framework (NSQF) is a quality assurance framework. It is therefore a nationally integrated education and competency based skill framework.

Sector Skill Councils (SSC) are industry led national partner organizations that bring together all the stakeholders from their respective sectors. Based on the needs of the industries in the concerned sector, the SSCs are developing the National Occupational Standards (NOSs) and Qualification Packs(QPs) for the various job roles in their sectors and they will align the same to appropriate levels of the NSQF. They work to supplement the existing vocational training and education system for the Industry Sector in meeting the entire value chain's requirements of appropriately trained manpower in quantity and quality across all levels on a sustained and evolving basis.

Eligibility

B.Voc. Syllabus is designed to be in line with NSQF and the students have the option to appear for Qualification Pack examinations designed by SSC to get the additional certificate which is over and above the B.Voc degree.

- HSC or equivalent from any recognized board. (Science, Commerce and Arts Stream)
- There is no age bar for admission in B.Voc under NSQF

Conduct of Classes and Credits

The curriculum in each of the semesters/years of the programme(s) will be a suitable mix of general education and skill development components. The General Education Component shall have 40% of the teaching/ training under the scheme leading to Certificate/ Diploma / B.Voc. degree or Masters programme are full time degree courses. These are not conducted as an add-on programme. While formulating the curriculum under the scheme, institutions will ensure to follow a choice based credit system and will provide provisions for credit transfer across the courses. The credit distribution should be rationally provided for the practical work, apprenticeships, on-job training and project work.

The classroom infrastructure and conduct of classes will be done by the Institute. The Training Partner will be either approved by AICTE or National Skill Development Corporation (NSDC) or by Government Agencies. The Training Partner will impart the skill based education to the students. The Programme has been approved by AICTE after NoC from Mumbai University.

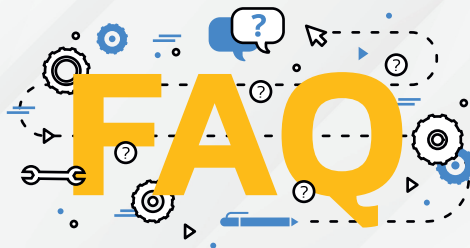
Why B.Voc is Beneficial to Students

- This scheme focuses on skills development based higher education as part of the Institute, leading to Bachelor of Vocation (B.Voc.) Degree with exists such as Diploma and Advance Diploma under the NSQF.
- Graduates completing B.Voc. will make meaningful participation in accelerating India's economy by gaining appropriate employment, becoming entrepreneurs and creating appropriate knowledge.
- Provides immediate and definite interventions to improve the lives of disadvantaged and marginalized youth through appropriate vocational training programs.
- Practical training will be provided by approved SKPs which is based specifically on a defined learning outcome.
- Certification for a trainee enrolled as a student will bring in more reputation and increase the work standards.
- Placement cell of Engineering college will work for the internship and placement opportunities of B.Voc. students.

Why should a Aspiring student choose B.Voc Course

B.Voc. (Bachelor of Vocational Degree) courses are available in several fields for students who have completed their 12th standard or equivalent. This is largely targeted towards youth who want to enhance their employability opportunities to learn and grow.

With the increase in big data market, there will be great demand for Artificial Intelligence and Data Science jobs. Even in the COVID-19 pandemic situation, when many jobs were lost due to the economic slowdown, the job roles in Data Science industry could sail through due to the availability of online tools and resources.



Q.1 What is the total time duration for a Bachelor of Vocational Education (B.Voc)?

A. The Bachelor of Vocational Education is for a total of three years.

Q.2 What is the eligibility criteria for admission into Bachelor of Vocational Education?

A. Students must fulfill the following eligibility criteria: They have to pass 10+2 from a recognised board or university. Streams can be Science, Commerce and Arts.

Q.3 What is the B.Voc. salary in India?

A. The salary package for B.Voc ranges from 2 LPA to 5 LPA for freshers, depending upon the job position offered. The average salary offered through the placement cell of Engineering college is Rs. 4.5 lacs.

Q.4 What is the scope of B.Voc. in India?

A. B.Voc. opens multiple doors for the students during and after the completion of the course. The course deals more with application-based studies rather than focusing on only theoretical knowledge.

Q.5 What after completing B.Voc.?

A. Students could go for a Master's Degree in vocational education after completing B.Voc. Students can also apply for Direct Second Year Engineering in Degree.

Q.6 Is B.Voc. equivalent to graduation?

A. Yes, vocational degrees are considered equivalent to other bachelor's degrees offered. They can pursue any course thereafter where the eligibility requirement is a bachelor's qualification.